# Service Manual

PIONEER
*The Art of Entertainment*

**ORDER NO.**
**RRV1471**

## STEREO CD CASSETE DECK RECEIVER

# XR-P160

**THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).**

| Type | Model | Power Requirement | The voltage can be converted by the following method. |
|---|---|---|---|
| | XR-P160 | | |
| NVXK | ○ | AC230V | ——— |
| MYIXK | ○ | AC220–230V | ——— |
| MYXK/EA | ○ | AC220–230V | ——— |
| MYXK/EB | ○ | AC220–230V | ——— |
| DD | ○ | AC110–127V/220–230V/240V | With the voltage selector |

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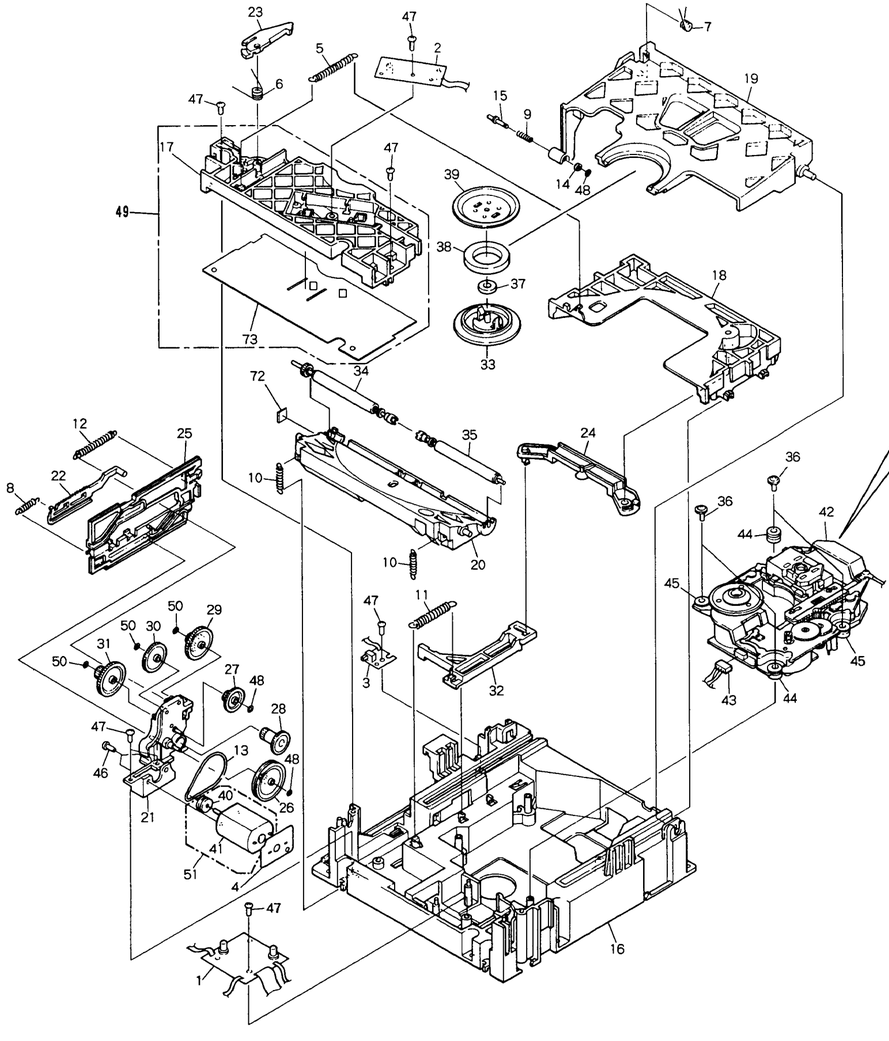
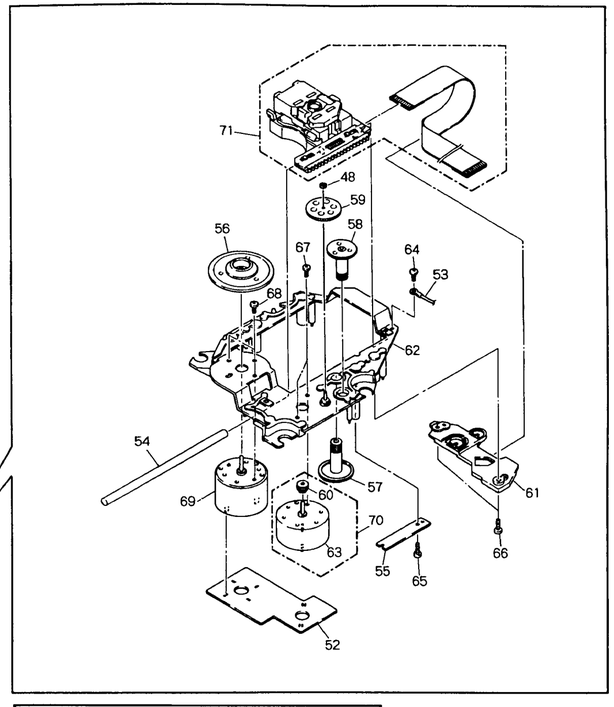
## 2.4 CD SLOT-IN MECHANISM

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| NSP | 1 | SENSOR BOARD ASSY | AWZ7328 |
| NSP | 2 | LED BOARD ASSY | AWZ7329 |
| NSP | 3 | SW BOARD ASSY | AWZ7330 |
| NSP | 4 | MOTOR BOARD ASSY | AWZ7331 |
| | 5 | SPRING | ABH7035 |
| | 6 | ROCK LEVER SPRING | ABH7019 |
| | 7 | CLAMP SPRING | ABH7020 |
| | 8 | RACK SPRING | ABH7021 |
| | 9 | P SPRING | ABH7022 |
| | 10 | ROLLER HOLDER SPRING | ABH7023 |
| | 11 | SPRING B | ABH7024 |
| | 12 | CAM PLATE SPRING | ABH7025 |
| | 13 | BELT A | AEB7012 |
| | 14 | WASHER | AEB7018 |
| | 15 | PIN | ALA7005 |
| | 16 | MECHANISM BASE | ANW7022 |
| | 17 | DISC PLATE | ANW7023 |
| | 18 | CENTERING PLATE | ANW7024 |
| | 19 | CLAMPER HOLDER | ANW7025 |
| | 20 | ROLLER HOLDER | ANW7078 |
| | 21 | GEAR HOLDER | ANW7027 |
| | 22 | RACK | ANW7028 |
| | 23 | ROCK LEVER | ANW7029 |
| | 24 | STARTING LEVER | ANW7030 |
| | 25 | CAM PLATE | ANW7031 |
| | 26 | GEAR PULLEY | ANW7032 |
| | 27 | GEAR A | ANW7033 |
| | 28 | GEAR B | ANW7034 |
| | 29 | GEAR C | ANW7035 |
| | 30 | GEAR D | ANW7036 |
| | 31 | DRIVE GEAR | ANW7037 |
| | 32 | STARTING PLATE | ANW7038 |
| | 33 | CLAMPER | ANW7044 |
| | 34 | ROLLER ASSY L | AXA7019 |
| | 35 | ROLLER ASSY R | AXA7020 |
| | 36 | SCREW | PBA1048 |
| NSP | 37 | H SPACER | PEB1249 |
| | 38 | CLAMP MAGNET | PMF1014 |
| | 39 | YOKE | PNB1216 |
| | 40 | MOTOR PULLEY | PNW1634 |
| NSP | 41 | MOTOR | PXM1002 |
| NSP | 42 | SERVO MECHANISM ASSY SL | AXA7017 |
| | 43 | CONNECTOR ASSY 2P (2mm PITCH) | PDE1238 |
| | 44 | FLOAT RUBBER | PEB1014 |
| | 45 | FLOAT RUBBER | PEB1132 |
| | 46 | SCREW | BMZ20P040FMC |
| | 47 | SCREW | PPZ30P060FMC |
| | 48 | WASHER | WT12D032D025 |
| | 49 | DISC PLATE ASSY | AEA7003 |
| | 50 | WASHER | WT17D034D025 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 51 | MOTOR ASSY | AEA7000 |
| | 52 | MECHANISM BOARD ASSY | PWX1192 |
| | 53 | GROUND LEAD UNIT | PDF1104 |
| | 54 | GUIDE BAR | PLA1094 |
| NSP | 55 | GEAR STOPPER | PNB1303 |
| | 56 | DISC TABLE | PNW1608 |
| | 57 | GEAR 1 | PNW2052 |
| | 58 | GEAR 2 | PNW2053 |
| | 59 | GEAR 3 | PNW2054 |
| | 60 | PINION GEAR | PNW2055 |
| | 61 | PWB HOLDER | PNW2057 |
| | 62 | CARRIAGE BASE | PNW2445 |
| NSP | 63 | DC MOTOR (CARRIAGE) | PXM1027 |
| | 64 | SCREW | BBZ26P060FMC |
| | 65 | SCREW | BPZ20P060FMC |
| | 66 | SCREW | BPZ26P100FMC |
| | 67 | SCREW | JFZ17P025FZK |
| | 68 | SCREW | JFZ20P030FNI |
| | 69 | DC MOTOR ASSY (SPINDLE) | PEA1235 |
| | 70 | DC MOTOR ASSY (CARRIAGE) | PEA1246 |
| | 71 | PICKUP ASSY | PEA1291 |
| | 72 | AV SHEET | AEB7021 |
| NSP | 73 | DISC PLATE SHEET | AEB7035 |
| OTHERS | | | |
| | | OIL (GREEN) | GEM1015 |



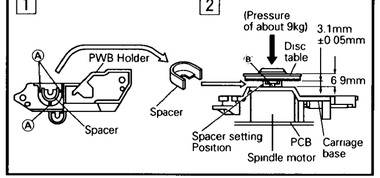
Servo Mechanism Assy SL



● How to install the disc table

1 Use nipper or other tool to cut the three sections marked Ⓐ figure 1. Then remove the spacer.

2 While supporting the spindle motor shaft with the stopper, put spacer on top of the motor base (angled so it doesn't touch section Ⓑ), and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



## 2.5 MECHANISM UNIT

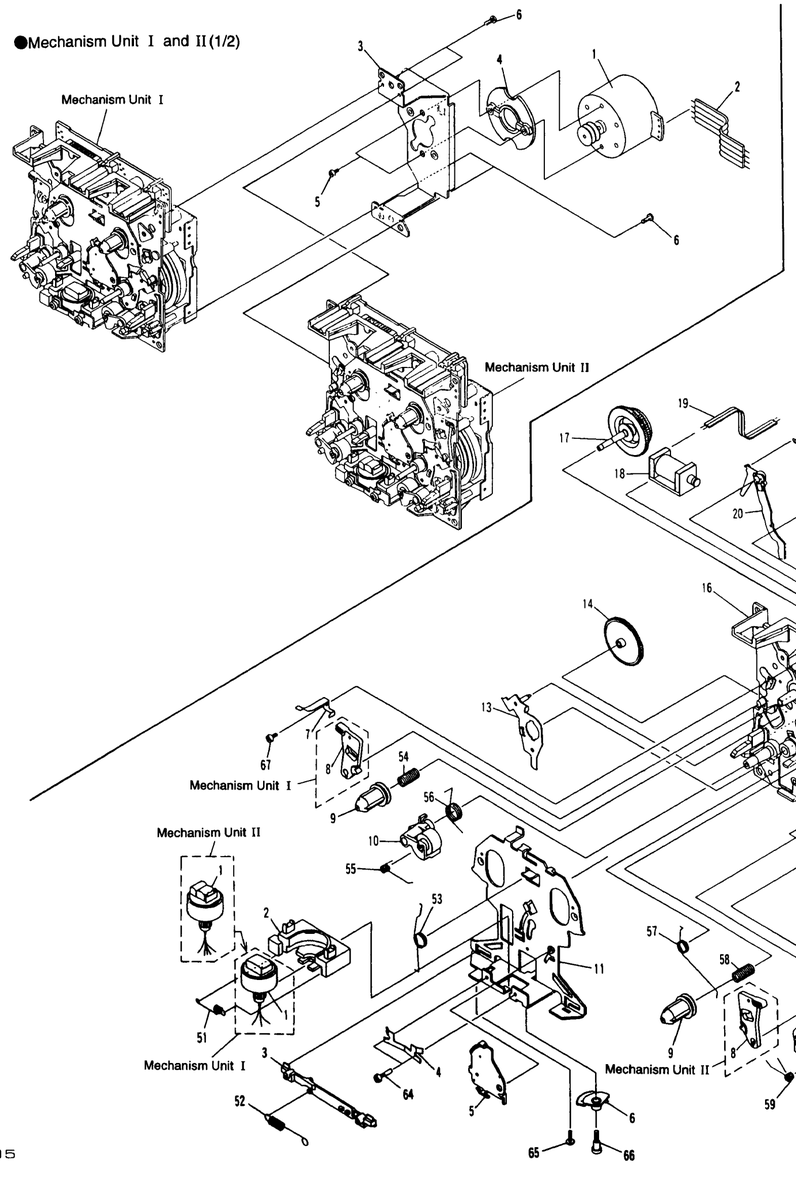
### ■ Mechanism unit I and II (1/2)

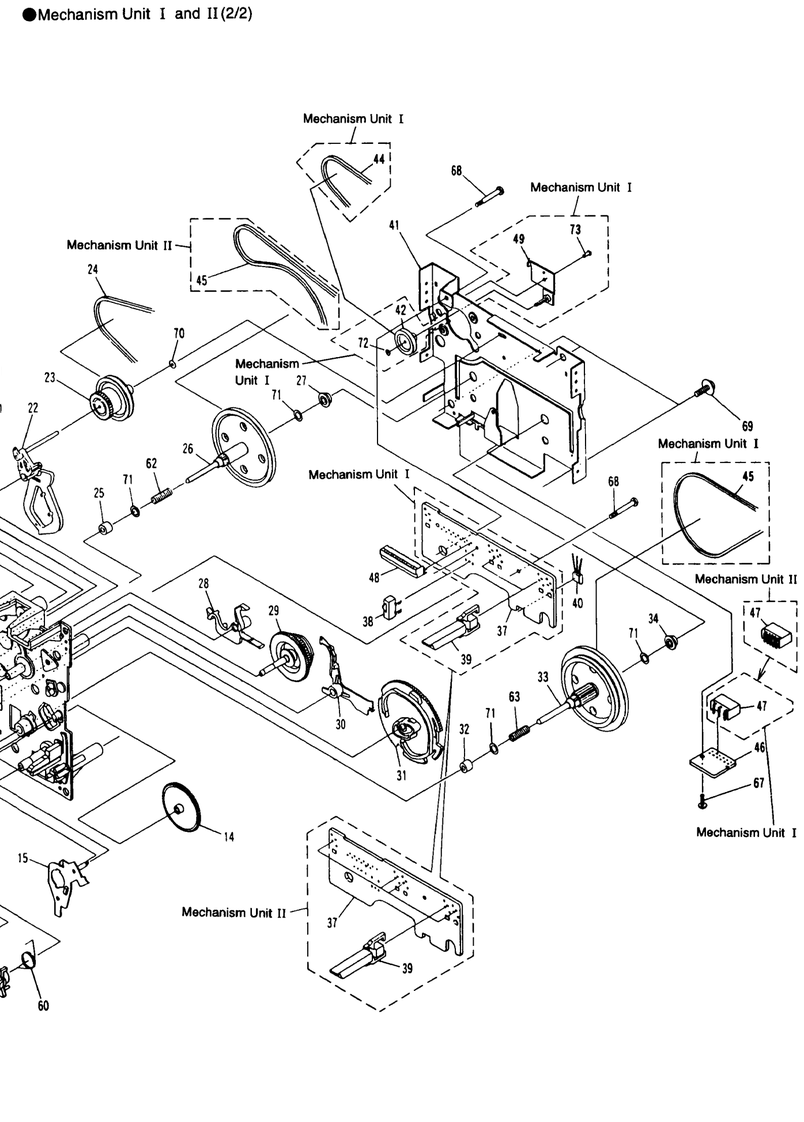
| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | ASSY MOTOR | RXM1080 |
| NSP | 2 | JUMPER WIRE | RDD1012 |
| | 3 | BRACKET MOTOR | RNE1830 |
| | 4 | SPACER | RNK1822 |
| | 5 | SCREW | RBA1100 |
| | 6 | SCREW | PCZ20P040FMC |

### ■ Mechanism unit I and II (2/2)

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | ASSY HOLDER HEAD (*1) | RXA1400 |
| | 1 | ASSY HOLDER HEAD (*2) | RXA1664 |
| | 2 | FRAME HEAD | RNK1715 |
| | 3 | LEVER HEAD | RNK1716 |
| | 4 | SPRING AZIMUTH | RBK1006 |
| | 5 | ASSY ARM ASSIST | RXA1401 |
| | 6 | GEAR ARM HEAD | RNK1717 |
| | 7 | SPRING CASSETTE | RBK1039 |
| | 8 | EJECT LOCK | RNK1718 |
| | 9 | CAP REEL | RNK1719 |
| | 10 | ASSY PINCH ARM L | RXA1403 |
| | 11 | CHASSIS HEAD | RNE1437 |
| | 12 | ASSY PINCH ARM R | RXA1404 |
| | 13 | ARM PLAY L | RNK1866 |
| | 14 | GEAR PLAY | RNK1867 |
| | 15 | ARM PLAY R | RNK1868 |
| | 16 | CHASSIS OS | RXA1411 |
| | 17 | ASSY SUB REEL L | RXA1407 |
| | 18 | SOLENOID | RXP1020 |
| | 19 | WIRE | RDC1006 |
| | 20 | ARM RVS | RNK1721 |
| | 21 | GEAR FF | RNK1723 |
| | 22 | ASSY ARM FR | RXA1412 |
| | 23 | ASSY PULLEY FR | RXA1413 |
| | 24 | BELT FR | REB1292 |
| | 25 | METAL | RNG1048 |
| | 26 | ASSY FLYWHEEL L | RXA1690 |
| | 27 | METAL | RNG1005 |
| | 28 | ARM BRAKE | RNK1724 |
| | 29 | ASSY SUB REEL R | RXA1408 |
| | 30 | ARM TRIGER | RNK1722 |
| | 31 | GEAR CAM | RNK1725 |
| | 32 | METAL | RNG1049 |
| | 33 | ASSY FLYWHEEL R | RXA1691 |
| | 34 | METAL | RNG1004 |
| | 35 | ..... | |
| | 36 | ..... | |
| | 37 | P. C. BOARD | RNP1610 |
| | 38 | SWITCH MODE | RSN1020 |
| | 39 | SWITCH (LEAF) | RSN1019 |
| | 40 | HALL IC | DN6851A |
| | 41 | BRACKET FW (*1) | RNE1854 |
| | 41 | BRACKET FW (*2) | RNE1438 |
| | 42 | PULLEY (*1 only) | RNK2132 |
| | 43 | ..... | |
| | 44 | BELT FW (*1 only) | REB1291 |
| | 45 | BELT MAIN (* 1) | REB1290 |
| | 45 | BELT MAIN (* 2) | REB1289 |
| | 46 | P. C. BOARD | RNP1348 |
| | 47 | HOUSING (*1) | RKP1396 |
| | 47 | HOUSING (*2) | RKP1397 |
| | 48 | CONNECTOR (*1) | RKP1713 |
| | 48 | CONNECTOR (*2) | RKP1714 |
| | 49 | ASSY HOLDER (*1 only) | RXA1689 |
| | 50 | ..... | |
| | 51 | SPRING | RBH1282 |
| | 52 | SPRING | RBH1283 |
| | 53 | SPRING | RBH1284 |
| | 54 | SPRING | RBH1286 |
| | 55 | SPRING | RBH1288 |
| | 56 | SPRING | RBH1291 |
| | 57 | SPRING | RBH1285 |
| | 58 | SPRING | RBH1287 |
| | 59 | SPRING | RBH1289 |
| | 60 | SPRING | RBH1290 |
| | 61 | SPRING | RBH1292 |
| | 62 | FWP SP (SPRING) | RBH1061 |
| | 63 | SPRING | RBH1325 |
| | 64 | SCREW (For AZIMUTH) | RBA1023 |
| | 65 | SCREW | RBA1027 |
| | 66 | SCREW | RBA1030 |
| | 67 | SCREW | PCZ20P040FMC |
| | 68 | SCREW | RBA1093 |
| | 69 | SCREW | RBA1094 |
| | 70 | WASHER | RBF1046 |
| | 71 | WASHER | WA26D047D013 |
| | 72 | WASHER (*1 only) | WT13D030D025 |
| | 73 | SCREW (*1 only) | RBA1118 |

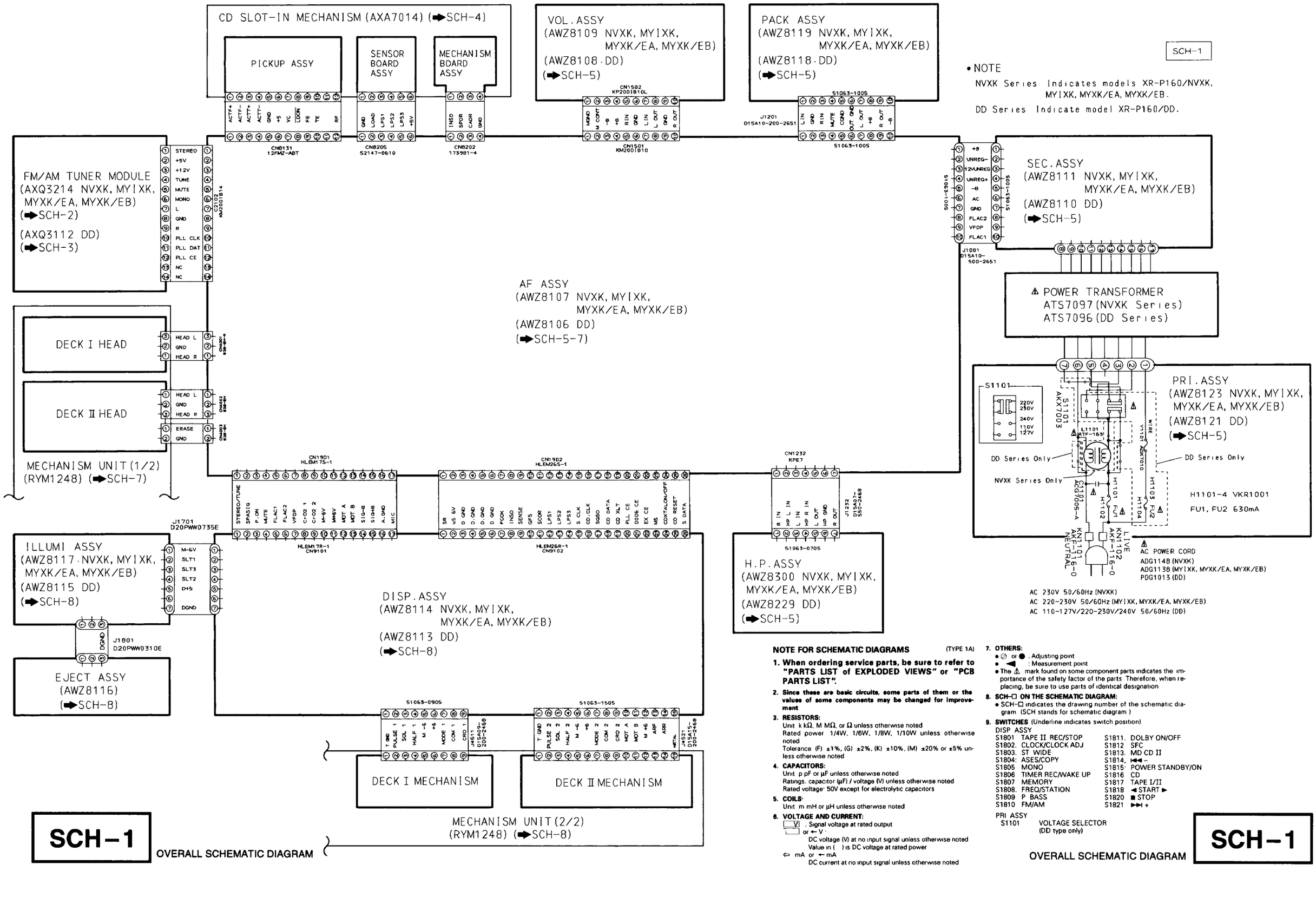
*Note)* **1: Mechanism Unit I*
**2: Mechanism Unit II*



# 3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

## 3.1 OVERALL SCHEMATIC DIAGRAM


CD SLOT-IN MECHANISM (AXA7014) (➡SCH-4)
PICKUP ASSY
SENSOR BOARD ASSY
MECHANISM BOARD ASSY
VOL. ASSY (AWZ8109 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8108 DD) (➡SCH-5)
PACK ASSY (AWZ8119 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8118 DD) (➡SCH-5)
SCH-1
• NOTE
NVXK Series Indicates models XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB.
DD Series Indicate model XR-P160/DD.
FM/AM TUNER MODULE (AXQ3214 NVXK, MYIXK, MYXK/EA, MYXK/EB) (➡SCH-2) (AXQ3112 DD) (➡SCH-3)
AF ASSY (AWZ8107 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8106 DD) (➡SCH-5-7)
SEC. ASSY (AWZ8111 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8110 DD) (➡SCH-5)
⚠ POWER TRANSFORMER ATS7097 (NVXK Series) ATS7096 (DD Series)
PRI. ASSY (AWZ8123 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8121 DD) (➡SCH-5)
DECK I HEAD
DECK II HEAD
MECHANISM UNIT (1/2) (RYM1248) (➡SCH-7)
ILLUMI ASSY (AWZ8117 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8115 DD) (➡SCH-8)
EJECT ASSY (AWZ8116) (➡SCH-8)
DISP. ASSY (AWZ8114 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8113 DD) (➡SCH-8)
H.P. ASSY (AWZ8300 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8229 DD) (➡SCH-5)
DECK I MECHANISM
DECK II MECHANISM
MECHANISM UNIT (2/2) (RYM1248) (➡SCH-8)
DD Series Only
NVXK Series Only
H1101-4 VKR1001
FU1, FU2 630mA
⚠ AC POWER CORD
ADG1148 (NVXK)
ADG1138 (MYIXK, MYXK/EA, MYXK/EB)
PDG1013 (DD)
AC 230V 50/60Hz (NVXK)
AC 220-230V 50/60Hz (MYIXK, MYXK/EA, MYXK/EB)
AC 110-127V/220-230V/240V 50/60Hz (DD)

**NOTE FOR SCHEMATIC DIAGRAMS** (TYPE 1A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement**
3. **RESISTORS:**
   Unit k kΩ, M MΩ, or Ω unless otherwise noted
   Rated power 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted
   Tolerance (F) ±1%, (G) ±2%, (K) ±10%, (M) ±20% or ±5% unless otherwise noted
4. **CAPACITORS:**
   Unit p pF or µF unless otherwise noted
   Ratings: capacitor (µF) / voltage (V) unless otherwise noted
   Rated voltage: 50V except for electrolytic capacitors
5. **COILS:**
   Unit m mH or µH unless otherwise noted
6. **VOLTAGE AND CURRENT:**
   V . Signal voltage at rated output
   or ← V :
   DC voltage (V) at no input signal unless otherwise noted
   Value in ( ) is DC voltage at rated power
   ⇦ mA or ← mA
   DC current at no input signal unless otherwise noted
7. **OTHERS:**
   • ⊘ or ● . Adjusting point
   • ◀ : Measurement point
   • The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation
8. **SCH-□ ON THE SCHEMATIC DIAGRAM:**
   • SCH-□ indicates the drawing number of the schematic diagram (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position)

DISP ASSY

| | | | |
|---|---|---|---|
| S1801 | TAPE II REC/STOP | S1811 | DOLBY ON/OFF |
| S1802 | CLOCK/CLOCK ADJ | S1812 | SFC |
| S1803 | ST WIDE | S1813 | MD CD II |
| S1804 | ASES/COPY | S1814 | ⏮◀ – |
| S1805 | MONO | S1815 | POWER STANDBY/ON |
| S1806 | TIMER REC/WAKE UP | S1816 | CD |
| S1807 | MEMORY | S1817 | TAPE I/II |
| S1808 | FREQ/STATION | S1818 | ◀ START ▶ |
| S1809 | P BASS | S1820 | ■ STOP |
| S1810 | FM/AM | S1821 | ▶▶I + |

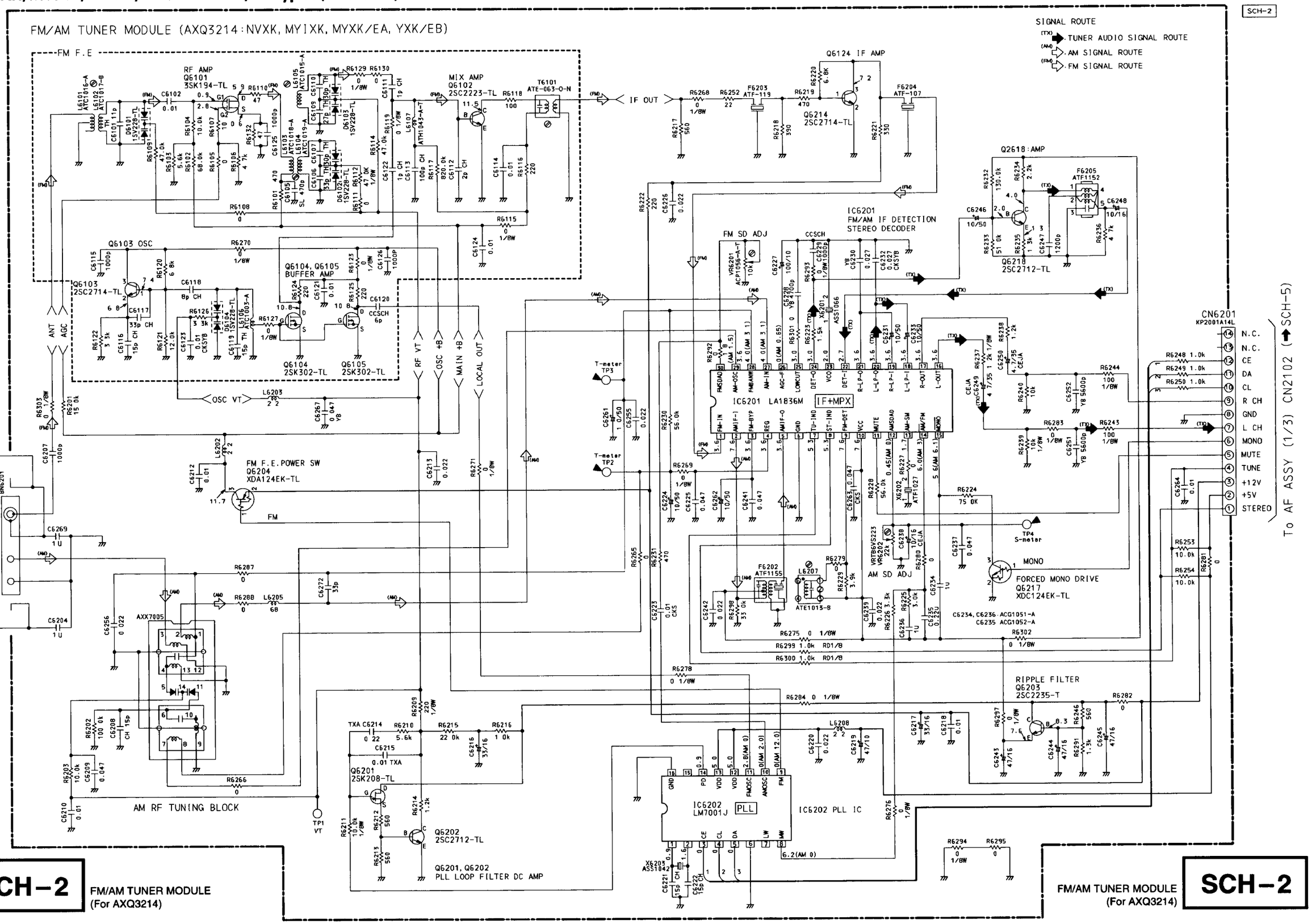
PRI ASSY

S1101 VOLTAGE SELECTOR (DD type only)

**SCH-1** OVERALL SCHEMATIC DIAGRAM

## 3.2 FM/AM TUNER MODULE

### ● For NVXK/MYIXK/MYXK/EA and MYXK/EB types (AXQ3214)






**SCH-2** FM/AM TUNER MODULE (For AXQ3214)

FM/AM TUNER MODULE (For AXQ3214) **SCH-2**

# 1. SAFETY INFORMATION

## (FOR EUROPEAN MODEL ONLY)

VARO !
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING !
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

LASER
Kuva 1
Lasersateilyn varoitusmerkki

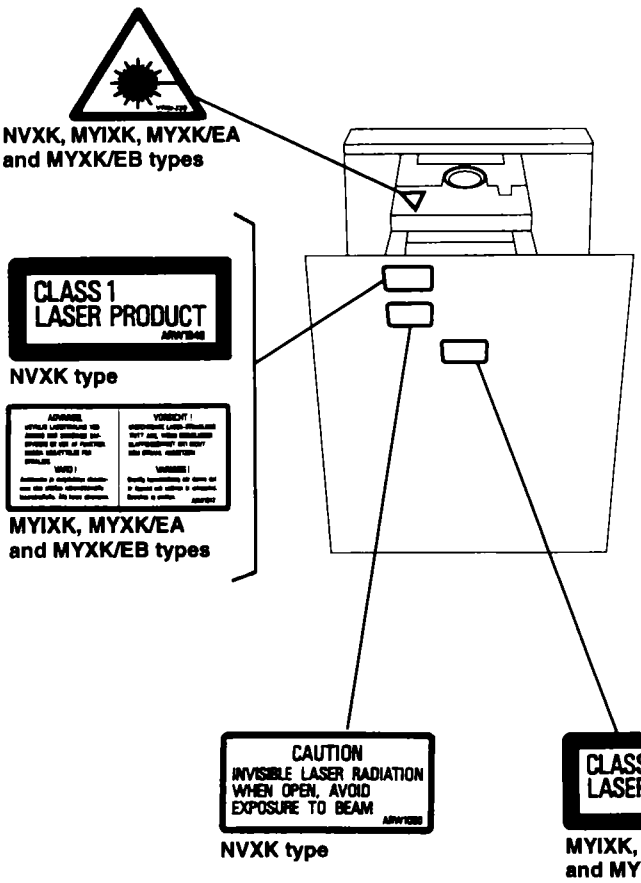
WARNING !
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780 – 785 nm

LASER
Picture 1
Warning sign for laser radiation

# LABEL CHECK


NVXK, MYIXK, MYXK/EA and MYXK/EB types
CLASS 1 LASER PRODUCT
NVXK type
MYIXK, MYXK/EA and MYXK/EB types
CAUTION
INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM
NVXK type
CLASS 1 LASER PRODUCT
MYIXK, MYXK/EA and MYXK/EB types

Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on $\overline{\text{CLMP}}$ terminal side ($\overline{\text{CLMP}}$ signal is OFF or high level.) Thus, the interlock will no longer function if the switch (S651) is deliberately set to $\overline{\text{CLMP}}$ terminal side. (low level)
   The interlock also does not function in the test mode*.
   Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* *Refer to page 58.*

# 2. EXPLODED VIEWS, PACKING AND PARTS LIST

*NOTES :*

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ● "are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

## 2.1 PACKING

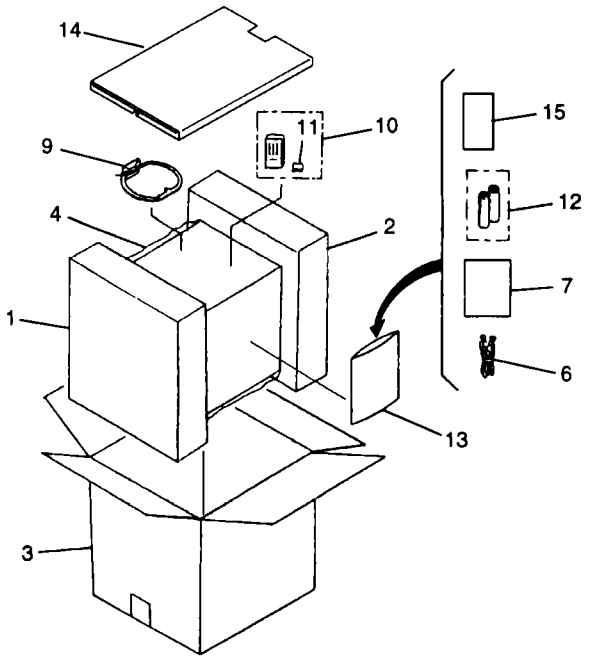
### ■ Contrast of XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB and DD

XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB and DD have the same construction except for the following:

| Mark | No. | Description | Part No. | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | NVXK | MYIXK | MYXK/EA | MYXK/EB | DD | |
| | 1 | Front pad | AHA7110 | AHA7110 | AHA7110 | AHA7110 | AHA7106 | |
| | 2 | Rear pad | AHA7111 | AHA7111 | AHA7111 | AHA7111 | AHA7107 | |
| | 3 | Packing case | AHD7244 | AHD7245 | AHD7245 | AHD7245 | AHD7242 | |
| | 4 | Packing sheet | AHG7001 | AHG7001 | AHG7001 | AHG7001 | AHG7003 | |
| | 6 | FM antenna assy | ADH1019 | ADH1019 | ADH1019 | ADH1019 | Not used | |
| | 6 | FM antenna | Not used | Not used | Not used | Not used | ADH1016 | |
| | 7 | Operating instructions (English) | ARB7062 | Not used | Not used | ARB7062 | Not used | |
| | 7 | Operating instructions (German/Italian) | Not used | ARC7094 | ARC7094 | Not used | Not used | |
| | 7 | Operating instructions (French/Dutch) | Not used | Not used | ARC7095 | Not used | Not used | |
| | 7 | Operating instructions (French/Swedish/Spanish/Portuguese) | Not used | Not used | Not used | ARC7096 | Not used | |
| | 7 | Operating instructions (English/Spanish/Chinese) | Not used | Not used | Not used | Not used | ARE7058 | |
| | 9 | Loop antenna assy | ATB7002 | ATB7002 | ATB7002 | ATB7002 | ATB7004 | |
| NSP | 12 | Battery (R03, AAA) | PEM1004 | PEM1004 | PEM1004 | PEM1004 | VEM-022 | |
| NSP | 13 | Vinyl bag | AHG1091 | AHG1091 | AHG1091 | AHG1091 | Not used | |
| | 13 | Vinyl bag (0.03 x 230 x 340) | Not used | Not used | Not used | Not used | Z21-038 | |
| | 14 | Spacer | AHB7013 | Not used | Not used | Not used | Not used | |
| | 15 | Speaker specification table | ARX7012 | ARX7012 | ARX7012 | ARX7012 | Not used | |

### ■ Parts List for XR-P160/NVXK

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | FRONT PAD | AHA7110 |
| | 2 | REAR PAD | AHA7111 |
| | 3 | PACKING CASE | AHD7244 |
| | 4 | PACKING SHEET | AHG7001 |
| | 5 | ..... | |
| | 6 | FM ANTENNA ASSY | ADH1019 |
| | 7 | OPERATING INSTRUCTIONS (English) | ARB7062 |
| | 8 | ..... | |
| | 9 | LOOP ANTENNA ASSY | ATB7002 |
| | 10 | REMOTE CONTROL UNIT (CU-XR015) | AXD7030 |
| | 11 | BATTERY LID | AZA7050 |
| NSP | 12 | BATTERY (R03, AAA) | PEM1004 |
| NSP | 13 | VINYL BAG | AHG1091 |
| | 14 | SPACER | AHB7013 |
| | 15 | SPEAKER SPECIFICATION TABLE | ARX7012 |



## 2.2 EXTERIOR

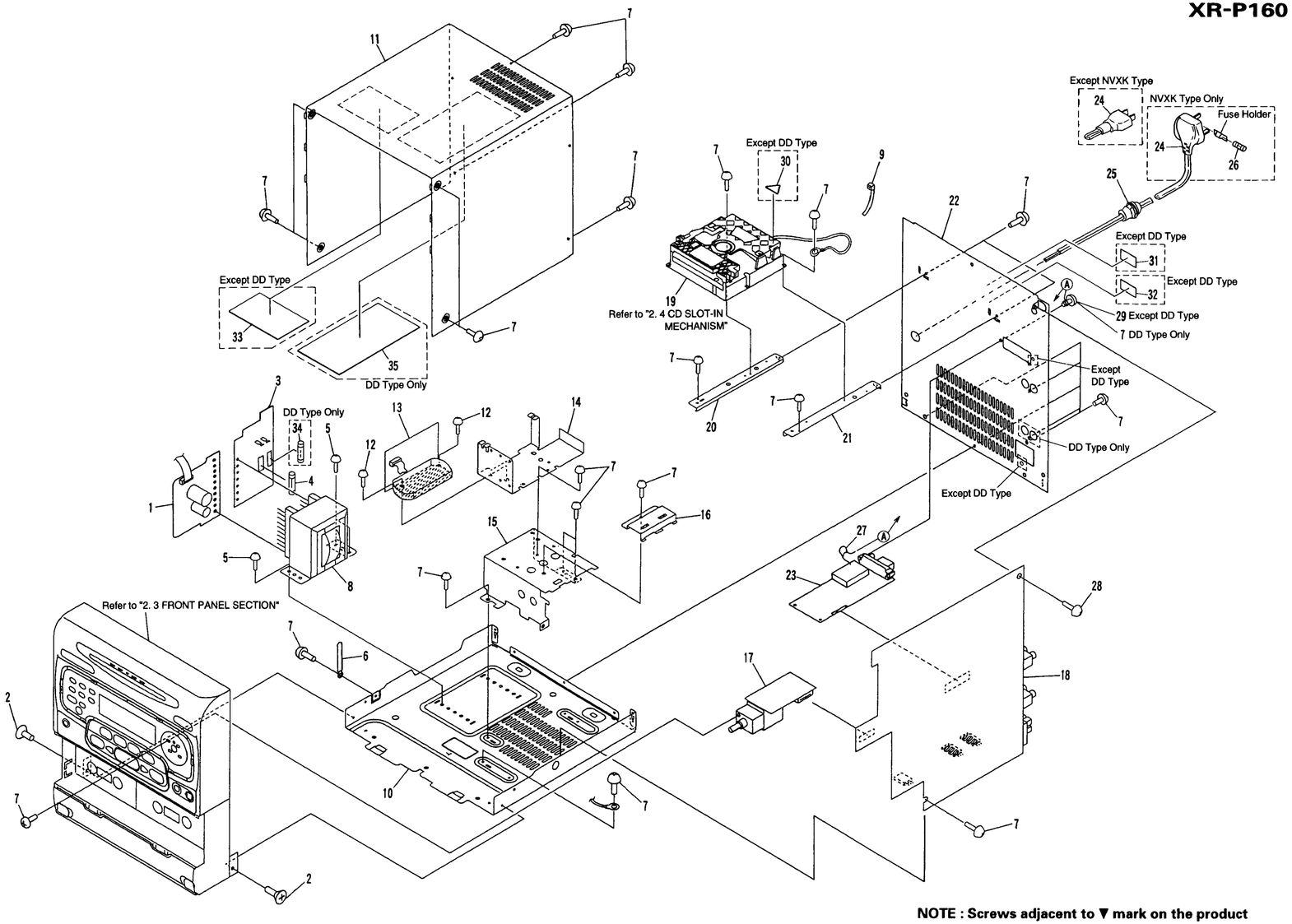
### ■ Contrast of XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB and DD

XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB and DD have the same construction except for the following:

| Mark | No. | Description | Part No. | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | NVXK | MYIXK | MYXK/EA | MYXK/EB | DD | |
| | 1 | SEC. assy | AWZ8111 | AWZ8111 | AWZ8111 | AWZ8111 | AWZ8110 | |
| | 2 | Screw | CBZ30P080FZK | CBZ30P080FZK | CBZ30P080FZK | CBZ30P080FZK | CBZ30P080FMC | |
| | 3 | PRI. assy | AWZ8123 | AWZ8123 | AWZ8123 | AWZ8123 | AWZ8121 | |
| ⚠ | 8 | Power transformer (AC 220–230V, T1 ) | ATS7097 | ATS7097 | ATS7097 | ATS7097 | Not used | |
| ⚠ | 8 | Power transformer (AC 110–127V/220–230V/240V, T1) | Not used | Not used | Not used | Not used | ATS7096 | |
| NSP | 10 | Chassis | ANA7046 | ANA7046 | ANA7046 | ANA7046 | ANA7045 | |
| | 11 | Bonnet case | AZN7345 | AZN7345 | AZN7345 | AZN7345 | AZN7516 | |
| | 13 | PAC assy | AWZ8119 | AWZ8119 | AWZ8119 | AWZ8119 | AWZ8118 | |
| NSP | 14 | Sub heat sink | ANH7041 | ANH7041 | ANH7041 | ANH7041 | ANH7040 | |
| NSP | 15 | Heat sink | ANH7036 | ANH7036 | ANH7036 | ANH7036 | ANH7035 | |
| | 16 | Transistor holder | ANG7084 | ANG7084 | ANG7084 | ANG7084 | ANG7079 | |
| | 17 | VOL. assy | AWZ8109 | AWZ8109 | AWZ8109 | AWZ8109 | AWZ8108 | |
| | 18 | AF assy | AWZ8107 | AWZ8107 | AWZ8107 | AWZ8107 | AWZ8106 | |
| | 20 | CD holder L | ANG7082 | ANG7082 | ANG7082 | ANG7082 | ANG7077 | |
| | 21 | CD holder R | ANG7083 | ANG7083 | ANG7083 | ANG7083 | ANG7078 | |
| | 22 | Rear panel | ANC7328 | ANC7329 | ANC7329 | ANC7329 | ANC7327 | |
| | 23 | FM/AM tuner module | AXQ3214 | AXQ3214 | AXQ3214 | AXQ3214 | AXQ3112 | |
| ⚠ | 24 | AC power cord | ADG1148 | ADG1138 | ADG1138 | ADG1138 | PDG1013 | |
| ⚠ | 26 | Fuse (T5A) (For AC power cord) | AEK1046 | Not used | Not used | Not used | Not used | |
| ⚠ | 27 | Capacitor (C1) | CKDYB122K50 | CKDYB122K50 | CKDYB122K50 | CKDYB122K50 | Not used | |
| | 30 | Caution label (G) | VRW–329 | VRW–329 | VRW–329 | VRW–329 | Not used | |
| NSP | 31 | Caution label (F) | ARW1046 | ARW1046 | ARW1046 | ARW1046 | Not used | |
| NSP | 32 | Caution label | ARW1050 | ARW1047 | ARW1047 | ARW1047 | Not used | |
| | 33 | Vibration proof plate | AEC7060 | AEC7060 | AEC7060 | AEC7060 | Not used | |
| ⚠ | 34 | Fuse (T630mA, FU2) | Not used | Not used | Not used | Not used | REK–098 | |
| | 35 | Vibration proof plate | Not used | Not used | Not used | Not used | AND7019 | |

### ■ Parts List for XR-P160/NVXK

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | SEC. ASSY | AWZ8111 |
| | 2 | SCREW | CBZ30P080FZK |
| | 3 | PRI. ASSY | AWZ8123 |
| ⚠ | 4 | FUSE (T630mA, FU1) | REK–098 |
| | 5 | SCREW | ASZ40P060FMC |
| NSP | 6 | CORD STOPPER | DNF1128 |
| | 7 | SCREW | BBZ30P080FZK |
| ⚠ | 8 | POWER TRANSFORMER (AC220–230V, T1) | ATS7095 |
| | 9 | BINDER | Z09–056 |
| NSP | 10 | SHASSIS | ANA7046 |
| | 11 | BONNET CASE | AZN7345 |
| | 12 | SCREW | BBZ30P180FMC |
| | 13 | PACK ASSY | AWZ8119 |
| NSP | 14 | SUB HEAT SINK | ANH7041 |
| NSP | 15 | HEAT SINK | ANH7036 |
| | 16 | TRANSISTOR HOLDER | ANG7084 |
| | 17 | VOL. ASSY | AWZ8109 |
| | 18 | AF ASSY | AWZ8107 |
| NSP | 19 | CD SLOT IN MECHA | AXA7014 |
| | 20 | CD HOLDER L | ANG7082 |
| | 21 | CD HOLDER R | ANG7083 |
| | 22 | REAR PANEL | ANC7328 |
| | 23 | FM/AM TUNER MODULE | AXQ3214 |
| ⚠ | 24 | AC POWER CORD | ADG1148 |
| | 25 | STRAIN RELIEF | CM–22B |
| ⚠ | 26 | FUSE (T5A) | AEK1046 |
| ⚠ | 27 | CAPACITOR (C1) | CKDYB122K50 |
| | 28 | SCREW | IBZ30P080FMC |
| | 29 | SCREW | ABA–115 |
| | 30 | CAUTION LABEL(G) | VRW-329 |
| NSP | 31 | CAUTION LABEL(F) | ARW1046 |
| NSP | 32 | CAUTION LABEL | ARW1050 |
| | 33 | VIBRATION PROOF PLATE | AEC7060 |




**NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.**

## 2.3 FRONT PANEL SECTION

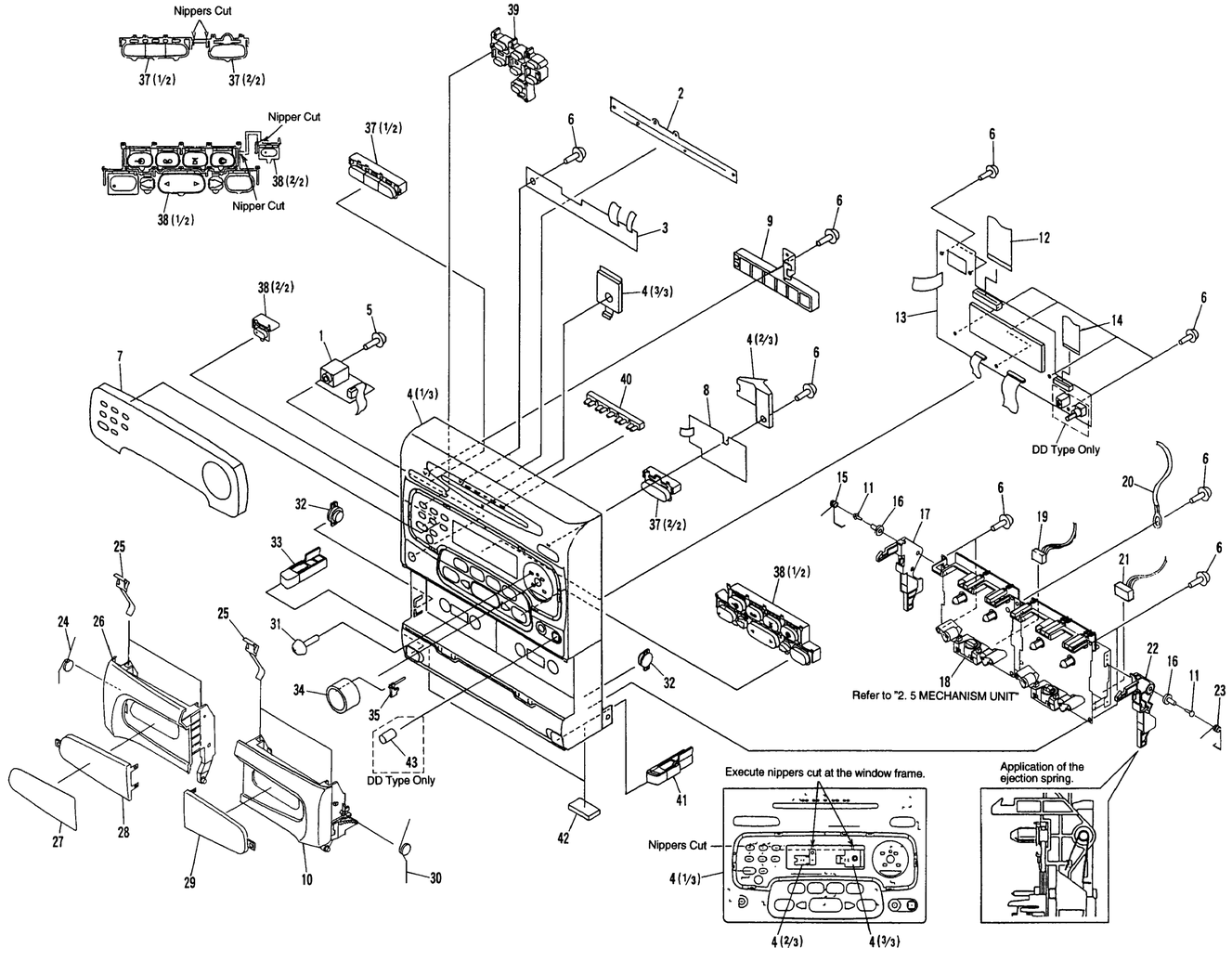
### ■ Contrast of XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB and DD

XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB and DD have the same construction except for the following:

| Mark | No. | Description | Part No. | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | NVXK | MYIXK | MYXK/EA | MYXK/EB | DD | |
| NSP | 1 | H.P. assy | AWZ8300 | AWZ8300 | AWZ8300 | AWZ8300 | AWZ8299 | |
| | 3 | ILLUMI. assy | AWZ8117 | AWZ8117 | AWZ8117 | AWZ8117 | AWZ8115 | |
| | 4 | Front panel | AZN7342 | AZN7342 | AZN7342 | AZN7342 | AZN7341 | |
| | 10 | Cassette door R | AZN7344 | AZN7344 | AZN7344 | AZN7344 | AZN7339 | |
| | 13 | DISP. assy | AWZ8114 | AWZ8114 | AWZ8114 | AWZ8114 | AWZ8113 | |
| | 15 | Spring L | ABH7028 | ABH7028 | ABH7028 | ABH7028 | Not used | |
| | 15 | Eject spring L | Not used | Not used | Not used | Not used | RBH1411 | |
| | 17 | Eject arm L | AMR7024 | AMR7024 | AMR7024 | AMR7024 | AMR7020 | |
| | 19 | Connector assy 3P (J5) | ADX7046 | ADX7046 | ADX7046 | ADX7046 | RKP1583 | |
| | 21 | Connector assy 5P (J4) | ADX7045 | ADX7045 | ADX7045 | ADX7045 | RKP1582 | |
| | 22 | Eject arm R | AMR7025 | AMR7025 | AMR7025 | AMR7025 | AMR7021 | |
| | 23 | Spring R | ABH7029 | ABH7029 | ABH7029 | ABH7029 | Not used | |
| | 23 | Eject spring R | Not used | Not used | Not used | Not used | RBH1412 | |
| | 24 | Door spring L | ABH7099 | ABH7099 | ABH7099 | ABH7099 | ABH7091 | |
| | 26 | Cassette door L | AZN7343 | AZN7343 | AZN7343 | AZN7343 | AZN7338 | |
| NSP | 27 | Getter | AAX7280 | AAX7281 | AAX7280 | AAX7280 | AAX7279 | |
| | 30 | Door spring R | ABH7100 | ABH7100 | ABH7100 | ABH7100 | ABH7092 | |
| | 43 | Mic knob | Not used | Not used | Not used | Not used | AAB7052 | |

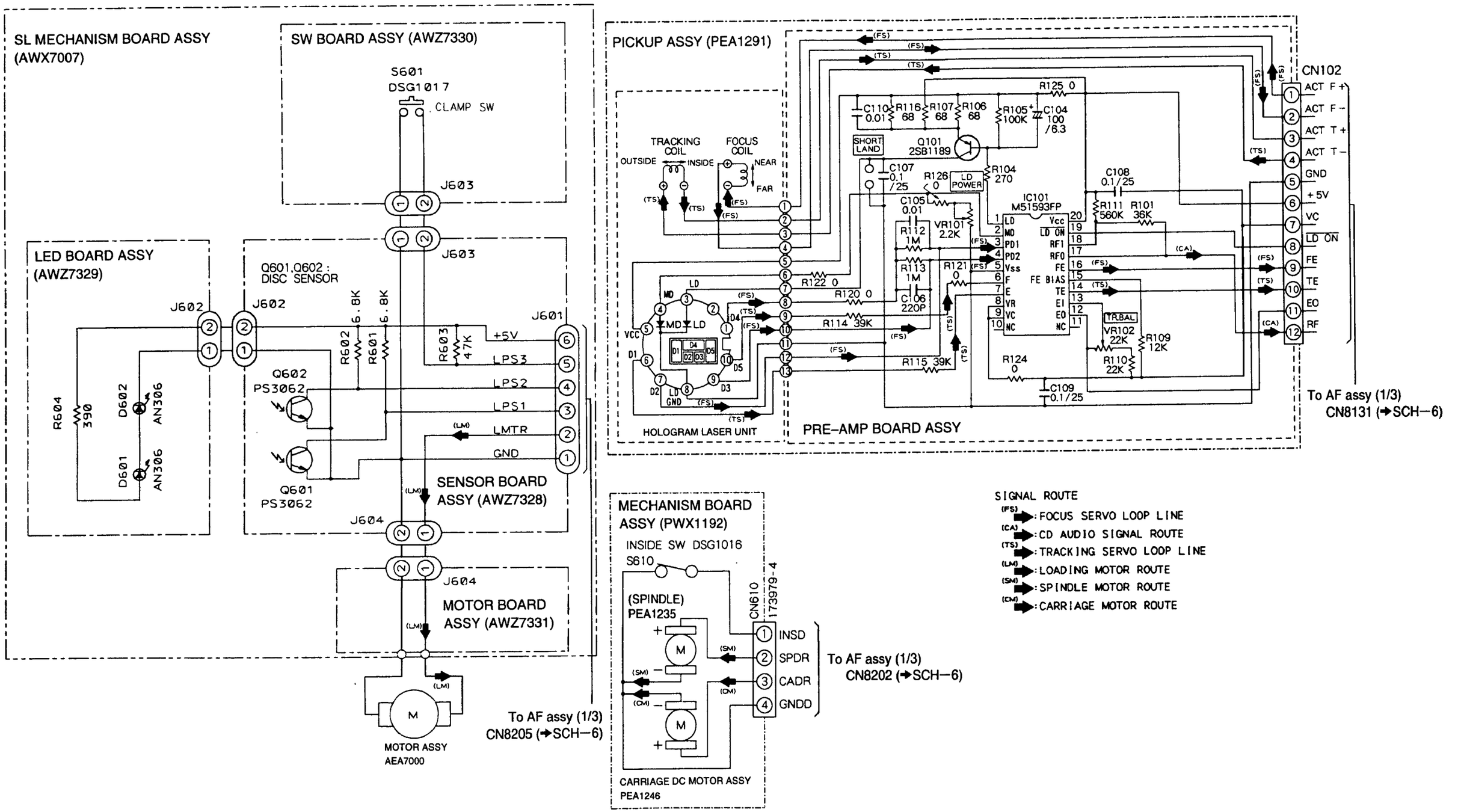
### ■ Parts List for XR-P160/NVXK

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| NSP | 1 | H.P. ASSY | AWZ8300 |
| | 2 | PLATE | AWL7015 |
| | 3 | ILLUMI. ASSY | AWZ8117 |
| | 4 | FRONT PANEL | AZN7342 |
| | 5 | SCREW | ABA1005 |
| | 6 | SCREW | BPZ30P080FMC |
| | 7 | FL WINDOW | AAK7252 |
| | 8 | EJECT ASSY | AWZ8116 |
| | 9 | MOLD | AMR7109 |
| | 10 | CASSETTE DOOR R | AZN7344 |
| | 11 | SCREW | BSZ20P120FMC |
| | 12 | FFC 26P (J2) | ADD7020 |
| | 13 | DISP. ASSY | AWZ8114 |
| | 14 | FFC 17P (J1) | ADD7019 |
| | 15 | SPRING L | ABH7028 |
| | 16 | COLLAR | RNK2135 |
| | 17 | EJECT ARM L | AMR7024 |
| | 18 | MECHANISM UNIT | RYM1248 |
| | 19 | CONNECTOR ASSY 3P (J5) | ADX7046 |
| NSP | 20 | WIRE (J3) | DE015VF0 |
| | 21 | CONNECTOR ASSY 5P (J4) | ADX7045 |
| | 22 | EJECT ARM R | AMR7025 |
| | 23 | SPRING R | ABH7029 |
| | 24 | DOOR SPRING L | ABH7099 |
| | 25 | SPRING | RBK1004 |
| | 26 | CASSETTE DOOR L | AZN7343 |
| NSP | 27 | GETTER | AAX7280 |
| | 28 | DECK WINDOW L | AAK7223 |
| | 29 | DECK WINDOW R | AAK7224 |
| | 30 | DOOR SPRING R | ABH7100 |
| | 31 | SCREW | BBZ30P080FZK |
| | 32 | DAMPER ASSY | AXA7021 |
| | 33 | EJECT BUTTON L | AAD7258 |
| | 34 | VOL. KNOB | AAB7077 |
| | 35 | COLOR MOLD | AAK7226 |
| | 36 | ..... | |
| | 37 | P. BASS BUTTON | AAD7257 |
| | 38 | FUNCTION BUTTON | AAD7287 |
| | 39 | TIMER BUTTON | AAD7256 |
| | 40 | CD LENS | AAK7225 |
| | 41 | EJECT BUTTON R | AAD7259 |
| | 42 | NON SKID SHEET | AEB1111 |



## 3.3 LED BOARD ASSY, SW BOARD ASSY, SENSOR BOARD ASSY, MOTOR BOARD ASSY, MECHANISM BOARD ASSY AND PICKUP ASSY

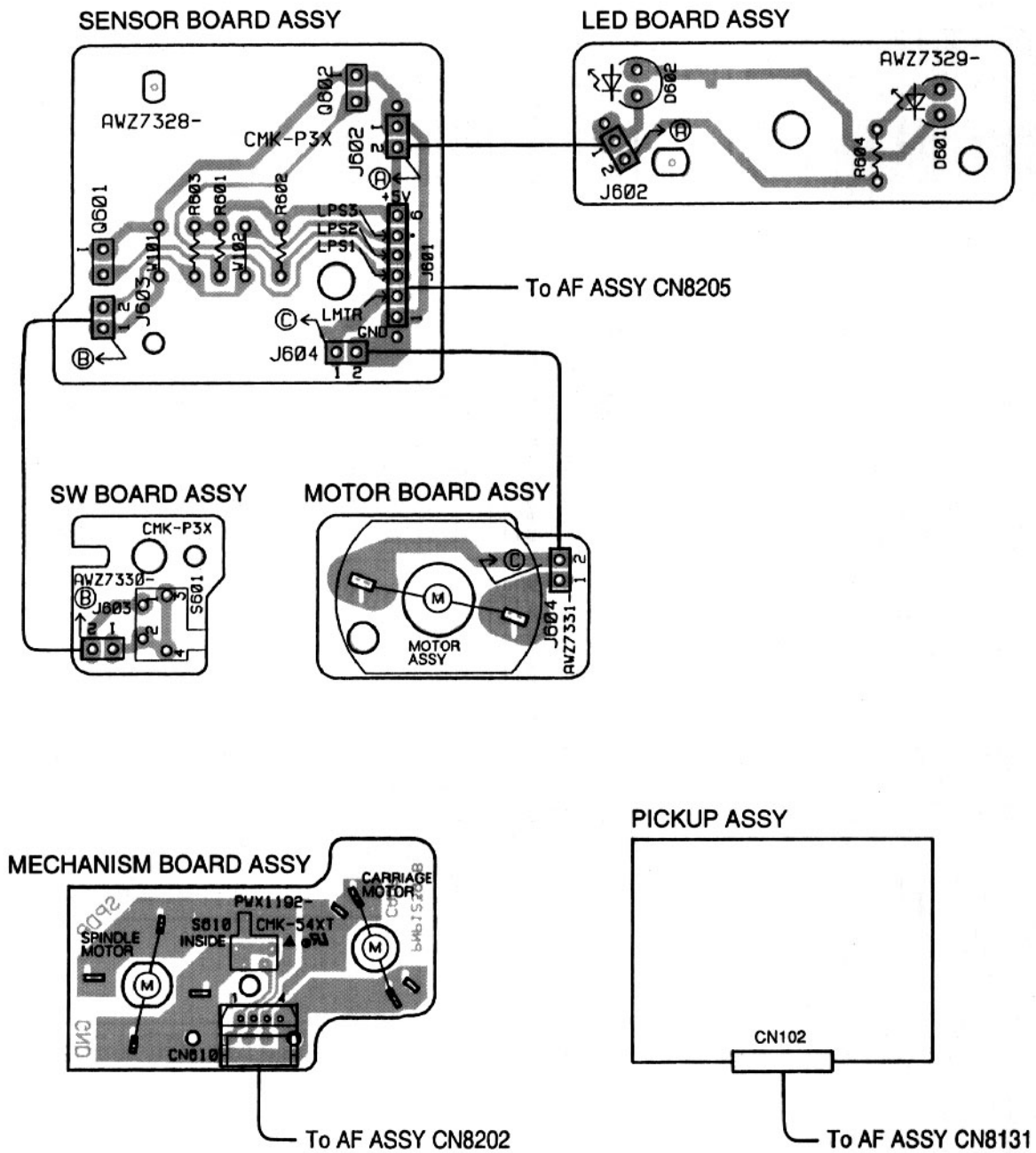
SCH–4






LED BOARD ASSY, SW BOARD ASSY, SENSOR BOARD ASSY, MOTOR BOARD ASSY, MECHANISM BOARD ASSY, PICKUP ASSY SCH–4

PCB – 3



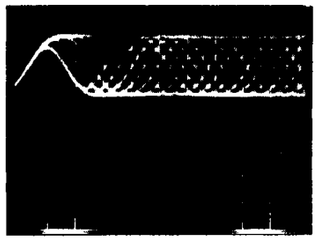

• This diagram is viewed from the mounted parts side.

## Waveforms

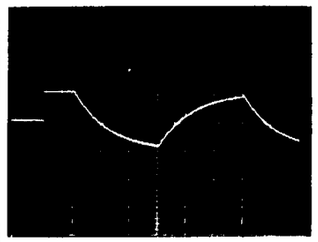
*Note: The encircled numbers denote measuring point in the schematic disgram.*

*2 FOCUS: Press the key without loading a disc.

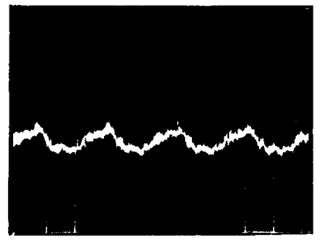
(2) TP1-Pin1: PLAY MODE (RF)
500mV/div 500nsec/div



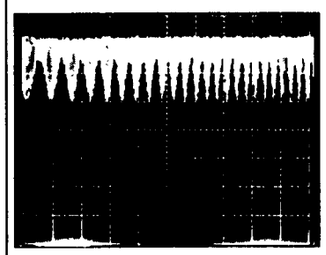

(5) IC8202-Pin3: FOCUS-IN (*2) MODE (FODR)
1V/div 200msec/div



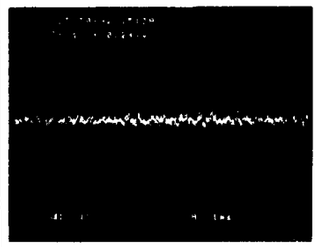

(7) IC8201-Pin3: PLAY MODE (SPDR)
1V/div 50msec/div



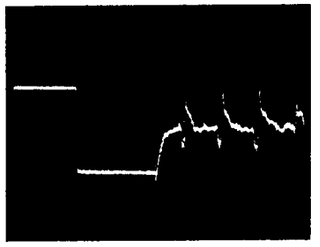

(2) TP1-Pin1: TRACK SEARCH MODE (RF)
500mV/div 200μsec/div



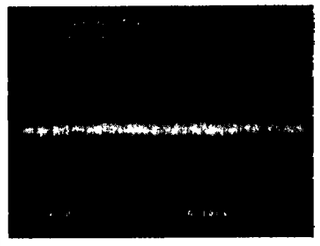

(5) IC8202-Pin3: PLAY MODE (FODR)
1V/div 1msec/div




(7) IC8201-Pin3: TRACK SEARCH MODE (SPDR)
2V/div 50msec/div

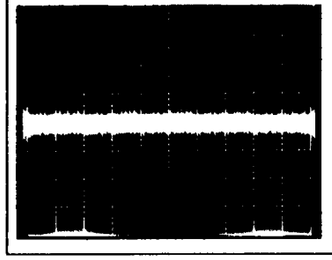



(3) TP1-Pin6: PLAY MODE (FOER)
100mV/div 10msec/div

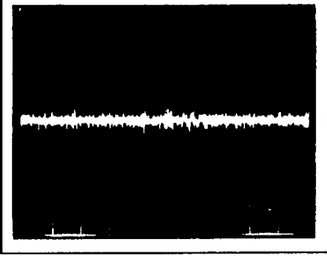



(8) IC8202-Pin9: PLAY MODE (CADR)
0.2V/div 2sec/div

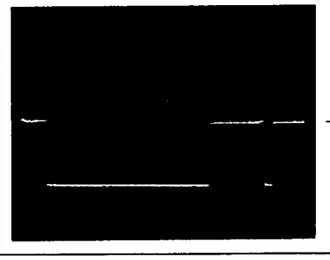
(4) TP1-Pin2: PLAY MODE (TRER)
1V/div 1msec/div




(6) IC8202-Pin4: PLAY MODE (TRDR)
500mV/div 1msec/div

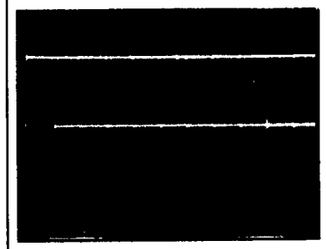



(8) IC8202-Pin9: TRACK SEARCH MODE (CADR)
2V/div 200msec/div

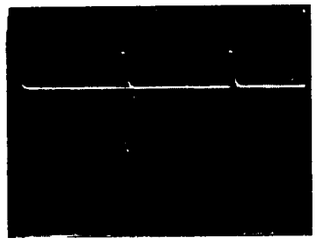



(9) IC8151-Pin32: PLAY MODE (EFM)
2V/div 500nsec/div

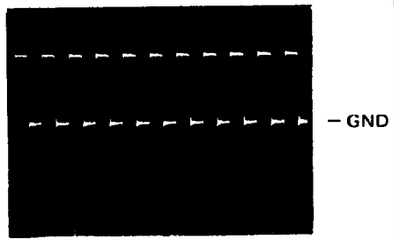
(19) IC8301-Pin44: PLAY MODE (1kHz) (PCMD)
2V/div 500nsec/div



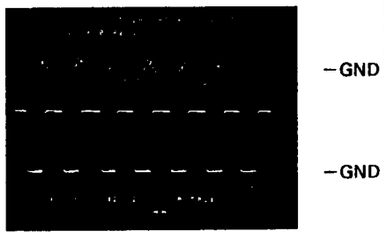

(33) IC8301-Pin25: PLAY MODE (MDP)
2V/div 2μsec/div



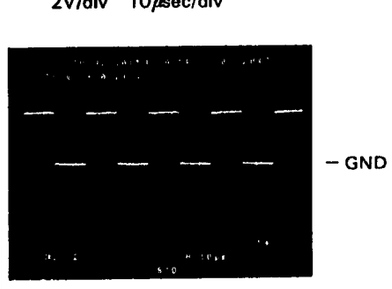

(16) IC8301-Pin46: PLAY MODE (1kHz) (BCK)
2V/div 500nsec/div



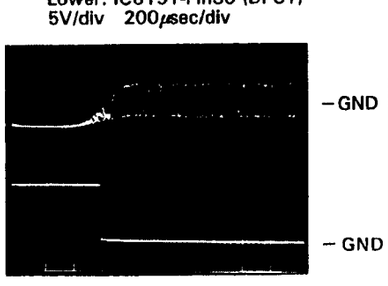

(23) : TRACK SEARCH MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin26 (C. OUT)
2V/div 50μsec/div




(18) IC8301-Pin42: PLAY MODE (1kHz) (LRCK)
2V/div 10μsec/div




(24) : PLAY MODE
Upper: TP1-Pin1 (RF) 1V/div
Lower: IC8151-Pin30 (DFCT)
5V/div 200μsec/div




### IC8151 (CXA1372Q)

| Pin No. | Voltage [V] | Pin No. | Voltage [V] | Pin No. | Voltage [V] | Pin No. | Voltage [V] |
|---|---|---|---|---|---|---|---|
| 1 | 2.5 | 13 | 2.5 | 25 | 5.0 | 37 | 2.0 |
| 2 | 2.5 | 14 | 2.5 to 2.6 | 26 | 0.1 | 38 | 2.7 to 2.8 |
| 3 | 2.5 | 15 | 2.5 | 27 | 4.9 | 39 | 2.5 |
| 4 | 2.5 | 16 | 0.8 | 28 | 0 | 40 | 3.2 |
| 5 | 2.4 | 17 | 1.3 | 29 | 0 | 41 | 0 |
| 6 | 2.5 | 18 | 2.5 | 30 | 0 | 42 | 2.5 |
| 7 | 2.6 | 19 | 0 | 31 | 0 | 43 | 2.5 |
| 8 | 2.5 | 20 | 5.0 | 32 | 2.7 | 44 | 2.5 |
| 9 | 2.5 | 21 | 5.0 | 33 | 5.0 | 45 | 2.5 |
| 10 | 5.0 | 22 | 4.9 | 34 | 1.3 | 46 | 2.5 |
| 11 | 2.5 | 23 | 5.0 | 35 | 1.0 | 47 | 2.5 |
| 12 | 2.5 | 24 | 4.9 to 5.0 | 36 | 5.0 | 48 | 2.4 |

### IC8301 (CXD2508AQ)

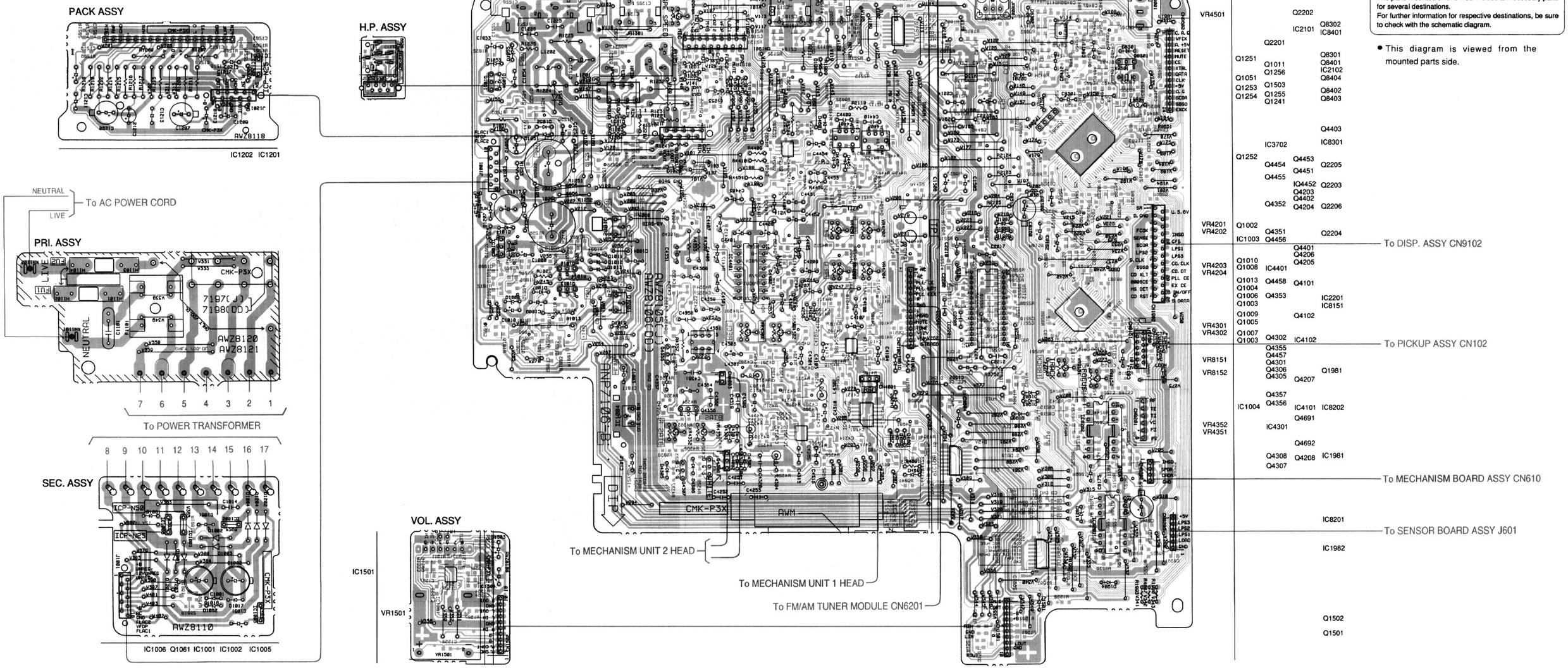
| Pin No. | Voltage [V] | Pin No. | Voltage [V] | Pin No. | Voltage [V] | Pin No. | Voltage [V] |
|---|---|---|---|---|---|---|---|
| 1 | 0.1 | 21 | 5.0 | 41 | 2.4 | 61 | 2.0 |
| 2 | 0.1 | 22 | 0 | 42 | 2.4 | 62 | 0 |
| 3 | 5.0 | 23 | 5.0 | 43 | 2.4 | 63 | 0 |
| 4 | 0.1 | 24 | 5.0 | 44 | 2.4 | 64 | 2.5 |
| 5 | 4.9 | 25 | 2.6 to 2.7 | 45 | 2.4 | 65 | 0 |
| 6 | 0 | 26 | 0.1 | 46 | 1.8 | 66 | 0 |
| 7 | 2.2 to 2.5 | 27 | 5.0 | 47 | 1.8 | 67 | 0 |
| 8 | 5.0 | 28 | 0 | 48 | 0 | 68 | 5.0 |
| 9 | 4.9 | 29 | 2.7 | 49 | 4.9 | 69 | 2.5 |
| 10 | 5.0 | 30 | 2.6 | 50 | 1.2 | 70 | 2.5 |
| 11 | 4.9 | 31 | 2.6 | 51 | 4.9 | 71 | 5.0 |
| 12 | 0 | 32 | 5.0 | 52 | 2.5 | 72 | 5.0 |
| 13 | 4.9 | 33 | 0 | 53 | 0 | 73 | 2.4 |
| 14 | 0.1 | 34 | 2.7 | 54 | 0 | 74 | 2.4 |
| 15 | 4.9 to 5.0 | 35 | 5.0 | 55 | 4.9 | 75 | 0 |
| 16 | 5.0 | 36 | 2.7 | 56 | 4.5 | 76 | 0 |
| 17 | 4.9 | 37 | 0 | 57 | 0 | 77 | 2.5 |
| 18 | 0 | 38 | 0 | 58 | 0 to 0.3 | 78 | 2.5 |
| 19 | 0 | 39 | 2.5 | 59 | 2.8 | 79 | 0 |
| 20 | 0 | 40 | 0 | 60 | 1.4 | 80 | 0 |

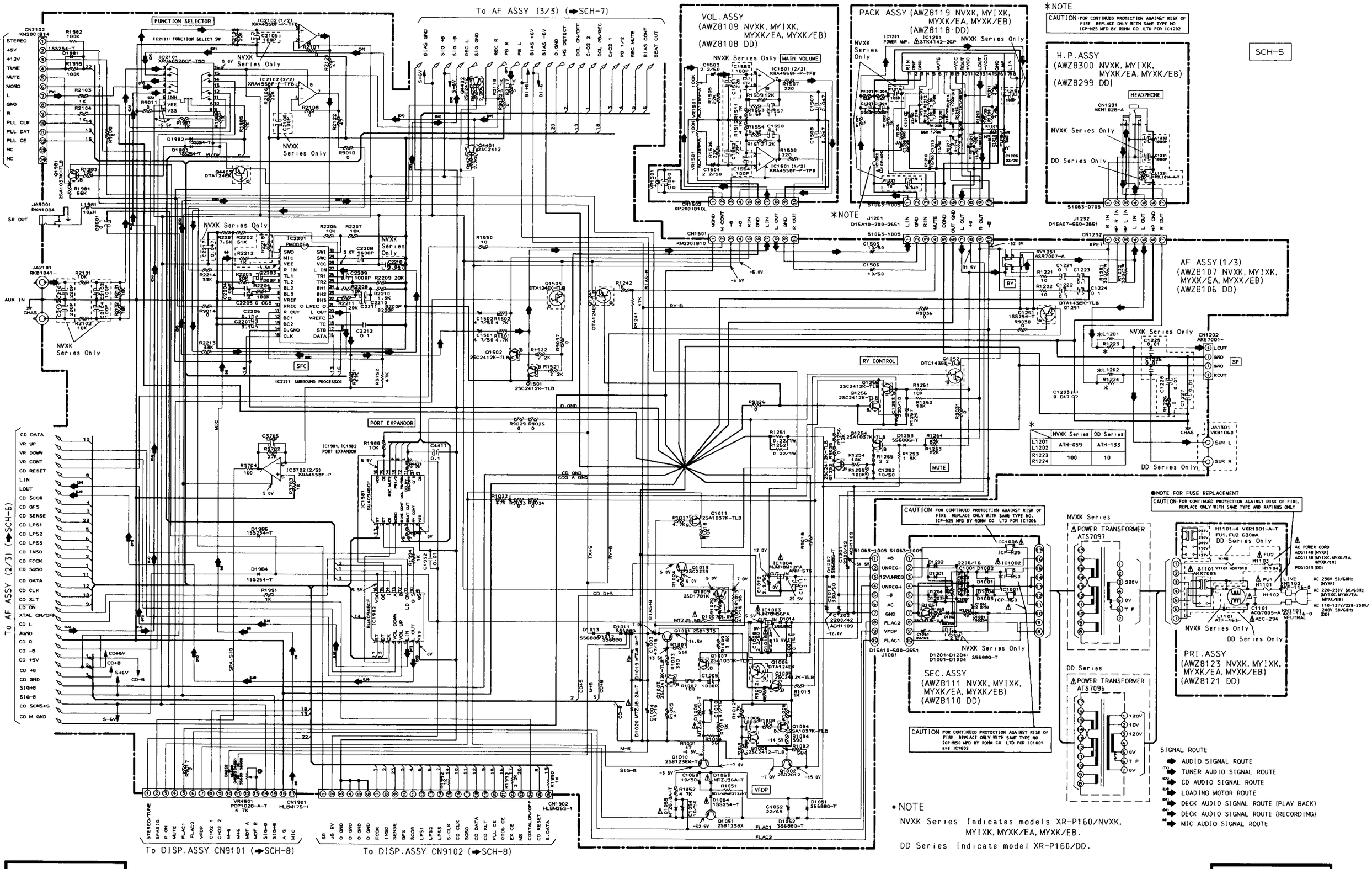
## 3.4 AF ASSY, VOL. ASSY, SEC. ASSY, PACK ASSY, PRI. ASSY, H.P. ASSY AND MECHANISM UNIT(1/2)



The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

- This diagram is viewed from the mounted parts side.




To FM/AM TUNER MODULE CN6201 (➡SCH-2 and 3)
To AF ASSY (2/3) (➡SCH-6)
To AF ASSY (3/3) (➡SCH-7)
FUNCTION SELECTOR
VOL. ASSY (AWZ8109 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8108 DD)
PACK ASSY (AWZ8119 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8118 DD)
H.P. ASSY (AWZ8300 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8299 DD)
AF ASSY (1/3) (AWZ8107 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8106 DD)
SEC. ASSY (AWZ8111 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8110 DD)
PRI. ASSY (AWZ8123 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8121 DD)
PORT EXPANDER
SFC
RY CONTROL
MUTE
To DISP. ASSY CN9101 (➡SCH-8)
To DISP. ASSY CN9102 (➡SCH-8)
SCH-5
SIGNAL ROUTE
AUDIO SIGNAL ROUTE
TUNER AUDIO SIGNAL ROUTE
CD AUDIO SIGNAL ROUTE
LOADING MOTOR ROUTE
DECK AUDIO SIGNAL ROUTE (PLAY BACK)
DECK AUDIO SIGNAL ROUTE (RECORDING)
MIC AUDIO SIGNAL ROUTE

*NOTE

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO ICP-N25 MFD BY ROHM CO. LTD FOR IC1202

CAUTION FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE NO. ICP-N25 MFD BY ROHM CO. LTD FOR IC1006

CAUTION FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE NO ICP-N50 MFD BY ROHM CO. LTD FOR IC1001 and IC1002

●NOTE FOR FUSE REPLACEMENT

CAUTION-FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY

| | NVXK Series | DD Series |
|---|---|---|
| L1201 | ATH-059 | ATH-133 |
| L1202 | | |
| R1223 | 100 | 10 |
| R1224 | | |

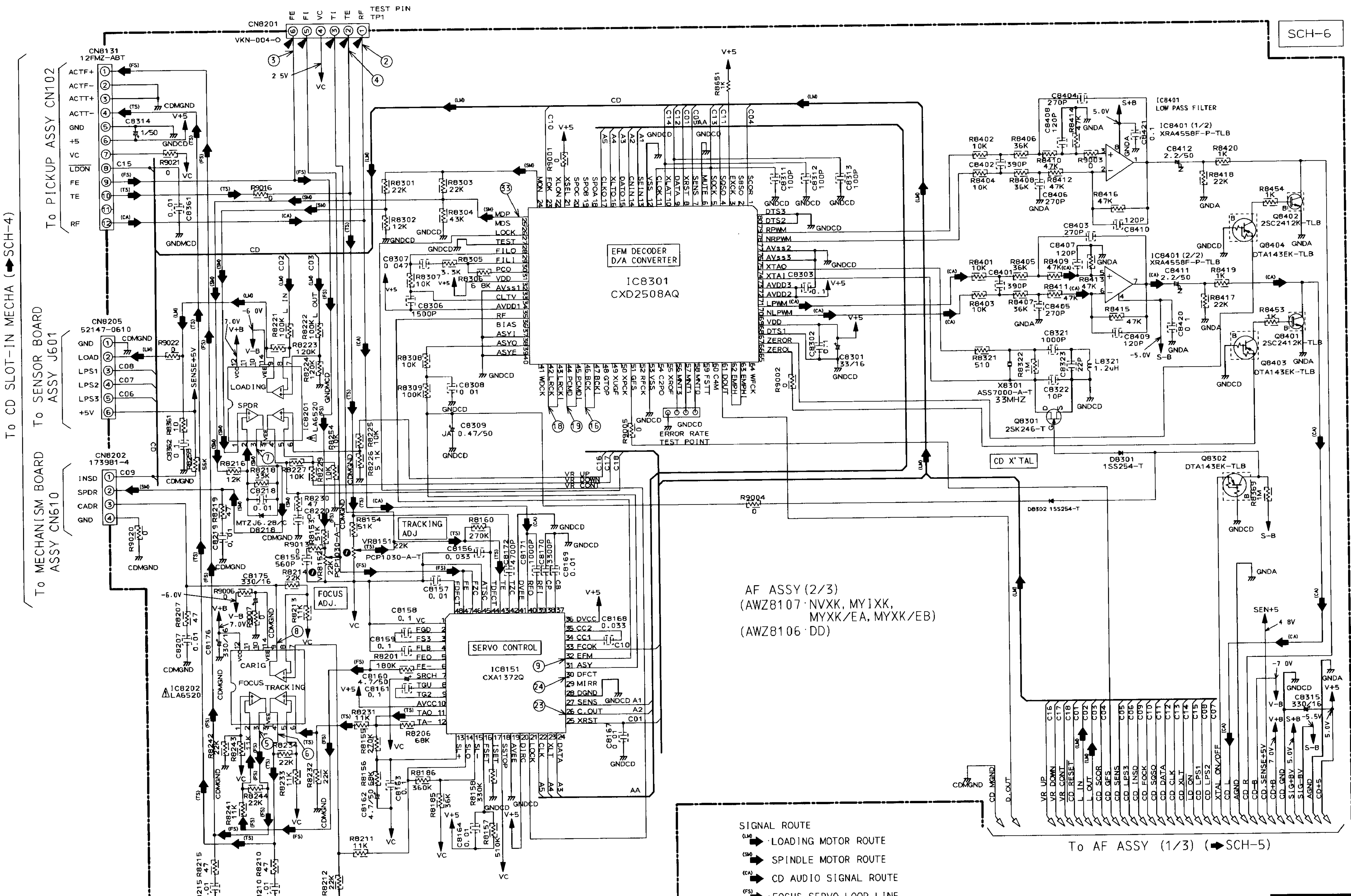
• NOTE

NVXK Series Indicates models XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB.

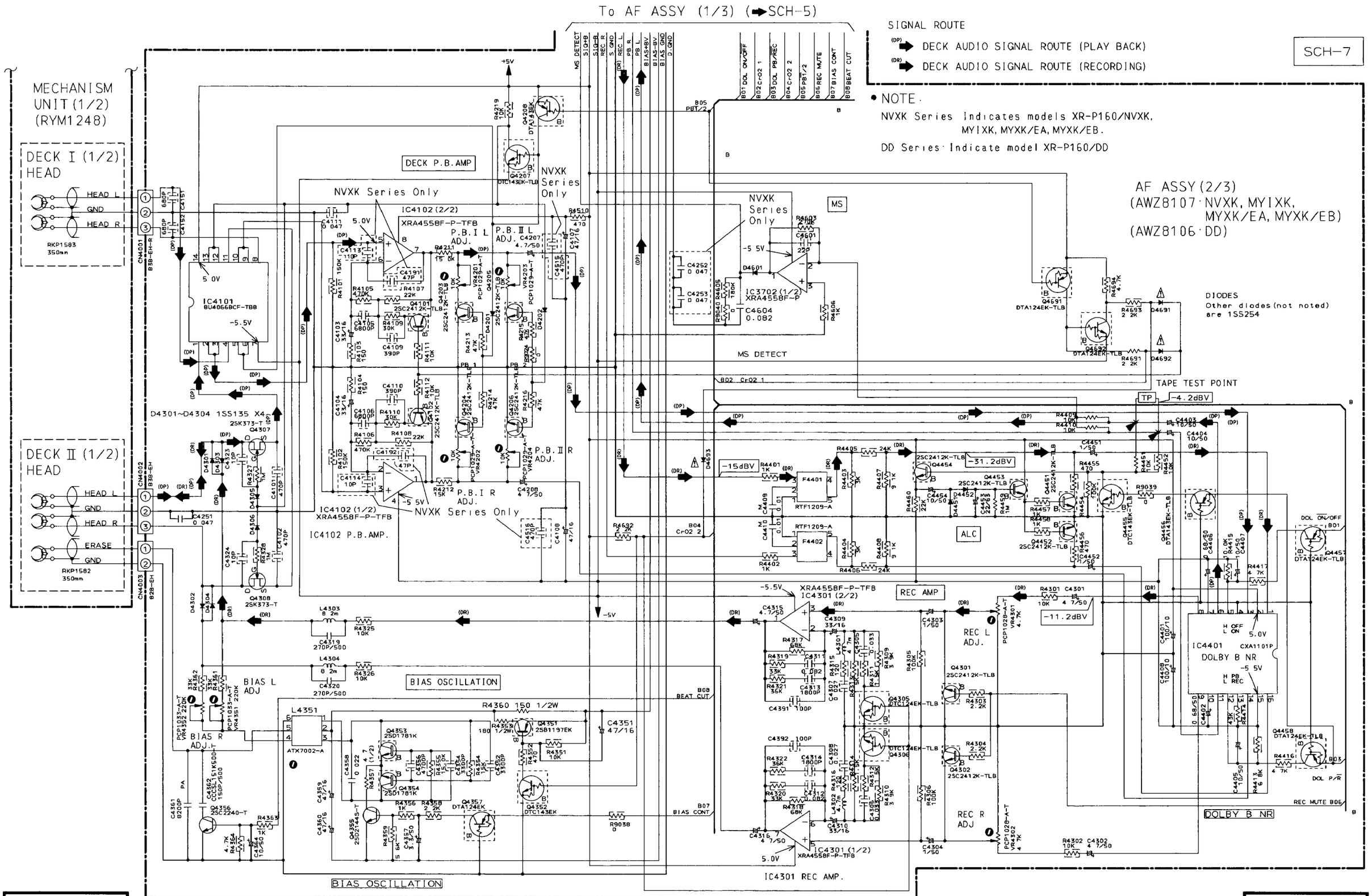
DD Series Indicate model XR-P160/DD.

**SCH-5** AF ASSY(1/3), VOL. ASSY, SEC. ASSY, PACK ASSY, PRI. ASSY, H.P. ASSY, MECHANISM UNIT(1/2)

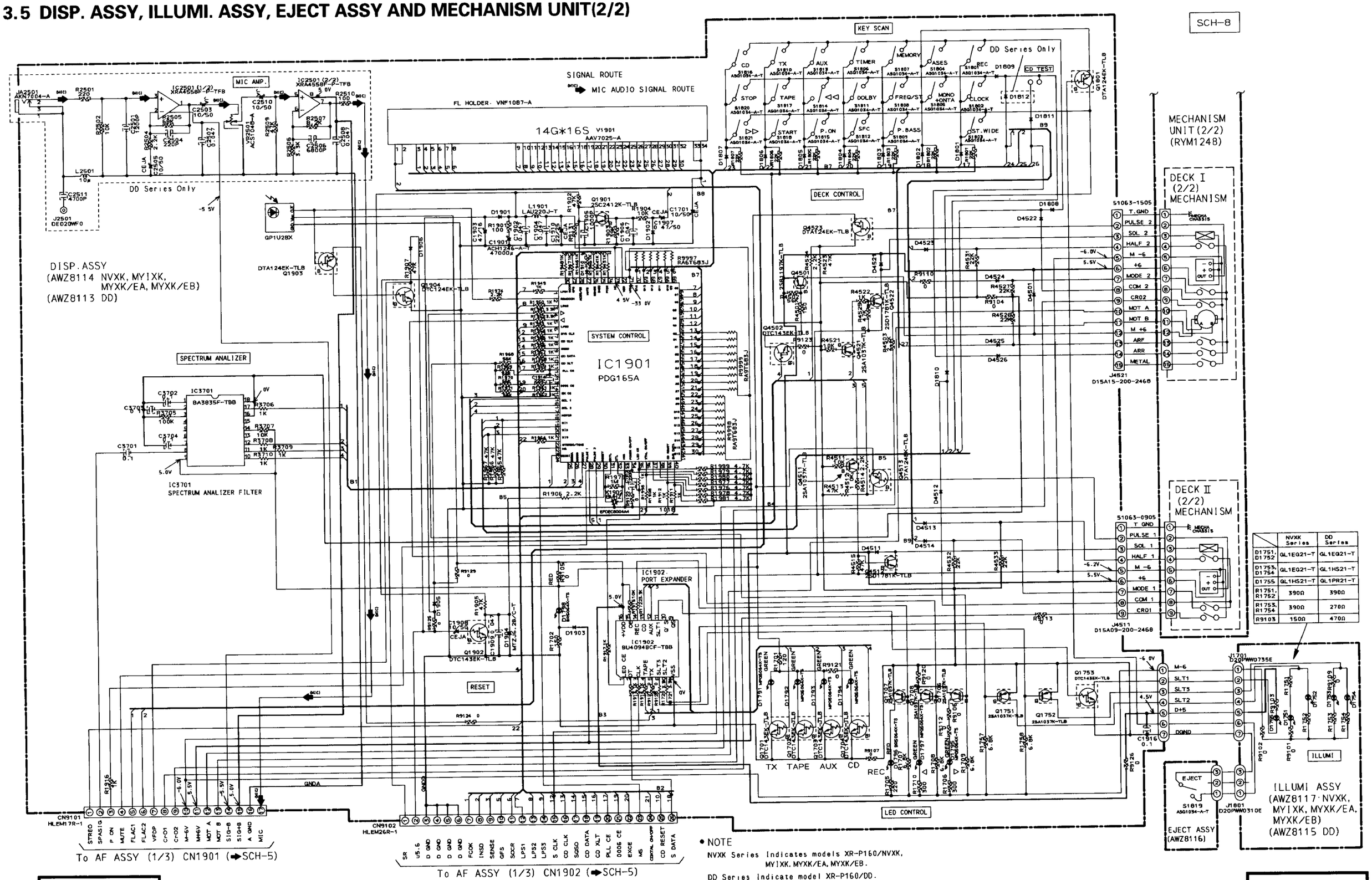
AF ASSY(1/3), VOL. ASSY, SEC. ASSY, PACK ASSY, PRI. ASSY, H.P. ASSY, MECHANISM UNIT(1/2) **SCH-5**


SCH-6
TEST PIN TP1
CN8201 VKN-004-O
FE FI VC TI TE RF
CN8131 12FMZ-ABT
ACTF+ ACTF- ACTT+ ACTT- GND +5 VC LDON FE TE RF
To PICKUP ASSY CN102
To CD SLOT-IN MECHA (➡SCH-4)
CN8205 52147-0610
GND LOAD LPS1 LPS2 LPS3 +5V
To SENSOR BOARD ASSY J601
CN8202 173981-4
INSD SPDR CADR GND
To MECHANISM BOARD ASSY CN610
IC8201 LA6520
LOADING
SPDR
IC8202 LA6520
CARIG
FOCUS
TRACKING
TRACKING ADJ
FOCUS ADJ.
EFM DECODER D/A CONVERTER
IC8301 CXD2508AQ
ERROR RATE TEST POINT
SERVO CONTROL
IC8151 CXA1372Q
IC8401 LOW PASS FILTER
IC8401 (1/2) XRA4558F-P-TLB
IC8401 (2/2) XRA4558F-P-TLB
Q8402 2SC2412K-TLB
Q8404 DTA143EK-TLB
Q8401 2SC2412K-TLB
Q8403 DTA143EK-TLB
X8301 ASS7000-A-T 33MHZ
Q8301 2SK246-T
CD X'TAL
D8301 1SS254-T
D8302 1SS254-T
Q8302 DTA143EK-TLB
AF ASSY (2/3)
(AWZ8107·NVXK, MYIXK,
MYXK/EA, MYXK/EB)
(AWZ8106·DD)
SIGNAL ROUTE
(LM) LOADING MOTOR ROUTE
(SM) SPINDLE MOTOR ROUTE
(CA) CD AUDIO SIGNAL ROUTE
(FS) FOCUS SERVO LOOP LINE
(TS) TRACKING SERVO LOOP LINE
CD MGND D.OUT VR UP VR DOWN VR CONT CD RESET L IN L OUT CD SCOR CD GFS CD SENS CD LPS3 CD INSD CD FOCK CD SQSO CD DATA CD CLK CD XLT LD ON CD LPS1 CD LPS2 XTAL ON/OFF CD L AGND CD R CD-B CD SENSE+5V CD+B CD GND SIG+BV SIG-BV AGND CD+5
To AF ASSY (1/3) (➡SCH-5)


SCH-6
AF ASSY (2/3)


To AF ASSY (1/3) (➡SCH-5)
SIGNAL ROUTE
(DP) DECK AUDIO SIGNAL ROUTE (PLAY BACK)
(DR) DECK AUDIO SIGNAL ROUTE (RECORDING)
SCH-7
• NOTE.
NVXK Series Indicates models XR-P160/NVXK, MYIXK, MYXK/EA, MYXK/EB.
DD Series Indicate model XR-P160/DD
MECHANISM UNIT (1/2) (RYM1248)
DECK I (1/2) HEAD
HEAD L
GND
HEAD R
RKP1583 350mm
DECK II (1/2) HEAD
HEAD L
GND
HEAD R
ERASE
GND
RKP1582 350mm
DECK P.B.AMP
NVXK Series Only
IC4102 (2/2) XRA4558F-P-TFB
P.B.II L ADJ.
P.B.II R ADJ.
P.B.I L ADJ.
P.B.I R ADJ.
IC4102 (1/2) XRA4558F-P-TFB
IC4102 P.B.AMP.
IC4101 BU4066BCF-TBB
D4301~D4304 1SS135 X4
BIAS OSCILLATION
BIAS L ADJ
BIAS R ADJ
L4351 ATX7002-A
AF ASSY (2/3) (AWZ8107 NVXK, MYIXK, MYXK/EA, MYXK/EB) (AWZ8106 DD)
MS
MS DETECT
IC3702 (1/2) XRA4558F-P
IC4301 (2/2) XRA4558F-P-TFB
IC4301 REC AMP.
REC AMP
REC L ADJ.
REC R ADJ
IC4401 CXA1101P DOLBY B NR
DOLBY B NR
ALC
TAPE TEST POINT
TP -4.2dBV
-15dBV
-31.2dBV
-11.2dBV
DIODES
Other diodes (not noted) are 1SS254
REC MUTE B06
DOL P/R
DOL ON/OFF B01
BIAS CONT B07
BEAT CUT B08

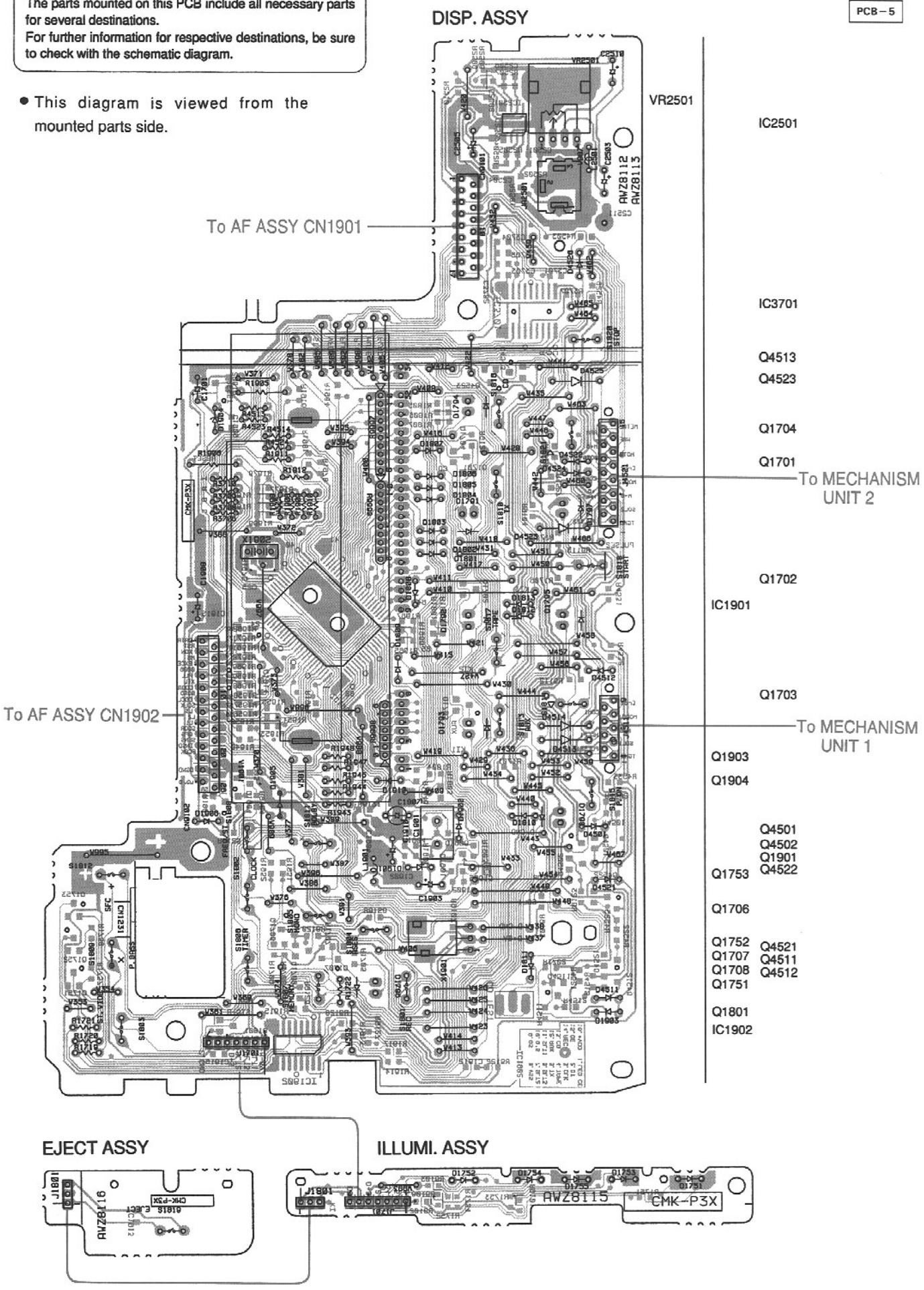
## 3.5 DISP. ASSY, ILLUMI. ASSY, EJECT ASSY AND MECHANISM UNIT(2/2)



PCB – 5

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

- This diagram is viewed from the mounted parts side.



# 4. PCB PARTS LIST

*NOTES :*

- *Parts marked by " NSP " are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by " ● " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

*Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

*560Ω → 56 x 10¹ = 561 ..... RD1/4PU 5 6 1 J*

*47kΩ → 47 x 10³ = 473 ..... RD1/4PU 4 7 3 J*

*0.5Ω → 0R5 ..... RN2H 0 R 5 K*

*1Ω → 1R0 ..... RS1P 1 R 0 K*

*Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).*

*5.62kΩ → 562 x 10¹ = 5621 ..... RN1/4PC 5 6 2 1 F*

## ■ FOR XR-P160/NVXK, MYXK/EA, MYXK/EB AND MYIXK

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | **LIST OF PCB ASSEMBLIES** | | |
| NSP | COMP. ASSY | | AWM7199 |
| | ├AF ASSY | | AWZ8107 |
| | ├VOL. ASSY | | AWZ8109 |
| | ├SEC. ASSY | | AWZ8111 |
| | ├DISP. ASSY | | AWZ8114 |
| | ├EJECT ASSY | | AWZ8116 |
| | ├ILLUMI ASSY | | AWZ8117 |
| | ├PACK ASSY | | AWZ8119 |
| | ├PRI. ASSY | | AWZ8123 |
| NSP | └H.P. ASSY | | AWZ8300 |
| | FM/AM TUNER MODULE | | AXQ3214 |
| NSP | CD SLOT-IN MECHANISM UNIT | | AXA7014 |
| NSP | ├SL MECHANISM BOARD ASSY | | AWX7007 |
| NSP | │ ├SENSOR BOARD ASSY | | AWZ7328 |
| NSP | │ ├LED BOARD ASSY | | AWZ7329 |
| NSP | │ ├SW BOARD ASSY | | AWZ7330 |
| NSP | │ └MOTOR BOARD ASSY | | AWZ7331 |
| NSP | └SERVO MECHANISM ASSY SL | | AXA7017 |
| NSP | └MECHANISM BOARD ASSY | | PWX1192 |
| | **AF ASSY** | | |
| | SEMICONDUCTORS | | |
| | IC4101 | | BU4066BCF |
| | IC1981, IC1982 | | BU4094BCF |
| | IC4401 | | CXA1101P |
| | IC8151 | | CXA1372Q |
| | IC8301 | | CXD2508AQ |
| ⚠ | IC8201, IC8202 | | LA6520 |
| ⚠ | IC1003 | | NJM78M56FA |
| ⚠ | IC1004 | | NJM78M12FA |
| | IC2201 | | PM0006A |
| | IC2102, IC3702, IC4102, IC4301, IC8401 | | XRA4558F-P |
| | IC2101 | | XRU4052BCF |
| | Q1004, Q1007, Q1011, Q1254, Q1981 | | 2SA1037K |
| | Q4351 | | 2SB1197K |
| | Q1010, Q1051 | | 2SB1238X |
| | Q1001 | | 2SB1375 |
| | Q1013 | | 2SC2235 |
| | Q4356 | | 2SC2240 |
| | Q1003, Q1005, Q1008, Q1253 | | 2SC2412K |
| | Q1255, Q1256, Q1501, Q1502 | | 2SC2412K |
| | Q4101, Q4102, Q4203–Q4206 | | 2SC2412K |
| | Q4301, Q4302, Q4401, Q4402 | | 2SC2412K |
| | Q4451–Q4454, Q8401, Q8402 | | 2SC2412K |
| | Q1009, Q4353, Q4354 | | 2SD1781K |
| | Q1002 | | 2SD2012 |
| | Q4355 | | 2SD2144S |
| | Q8301 | | 2SK246 |
| | Q4307, Q4308 | | 2SK373 |
| | Q1006, Q1241, Q1503, Q4357, Q4403 | | DTA124EK |
| | Q4457, Q4458, Q4691 | | DTA124EK |
| | Q1251, Q4208, Q4456, Q8302 | | DTA143EK |
| | Q8403, Q8404 | | DTA143EK |
| | Q4305, Q4306, Q4692 | | DTC124EK |
| | Q1252, Q4207, Q4352, Q4455 | | DTC143EK |
| | D4301–D4304 | | 1SS135 |
| ⚠ | D1054 | | 1SS254 |
| | D1251, D1981–D1985, D4201, D4202 | | 1SS254 |
| | D4305, D4306, D4451, D4452, D4601 | | 1SS254 |
| ⚠ | D4691–D4693 | | 1SS254 |
| | D8301, D8302 | | 1SS254 |
| ⚠ | D1053 | | MTZJ36A |
| | D1007 | | MTZJ5.6B |
| ⚠ | D1008 | | MTZJ6.2B |
| | D8218 | | MTZJ6.2B |
| ⚠ | D1055 | | MTZJ6.8A |
| ⚠ | D1018–D1020 | | MTZJ8.2A |
| | D1011–D1014, D1051, D1052, D1207 | | S5688G |
| | D1253, D4551–D4553 | | S5688G |
| | COILS AND FILTERS | | |
| | L1201, L1202 (5.3μH) | | ATH-059 |
| | L4351 [4.05MH(105kHz)] | | ATX7002 |
| | L1981 | | LAU100J |
| | L8321 | | LAU1R2J |
| | L4301, L4302 | | LTA472J |
| | L4303, L4304 | | LTA822J |
| | F4401, F4402 | | RTF1209 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| **SWITCHES AND RELAYS** | | | |
| | RY1251 | | ASR7007 |
| **CAPACITORS** | | | |
| | C1201, C1202 | | ACH1109 |
| | C4362 | | CCCSL151K500 |
| | C4319, C4320 | | CCCSL271K500 |
| | C4113, C4114, C4323, C4324, C8322 | | CCSQCH100D50 |
| | C2103–C2106, C4391, C4392 | | CCSQCH101J50 |
| | C8311–C8313 | | CCSQCH101J50 |
| | C8407–C8410 | | CCSQCH121J50 |
| | C3705 | | CCSQCH151J50 |
| | C4601, C8323 | | CCSQCH220J50 |
| | C2101, C2102 | | CCSQCH221J50 |
| | C8403–C8406 | | CCSQCH271J50 |
| | C4109, C4110, C8401, C8402 | | CCSQCH391J50 |
| | C4191, C4192 | | CCSQCH470J50 |
| | C4101, C4102, C4515, C4516 | | CCSQCH471J50 |
| | C4151, C4152 | | CCSQCH681J50 |
| | C8411, C8412 | | CEANP2R2M50 |
| | C4303, C4304, C4451, C4452, C8314 | | CEAS010M50 |
| | C1053, C1054, C1252, C1505, C1506 | | CEAS100M50 |
| | C4364, C4403–C4405, C4407, C4454 | | CEAS100M50 |
| | C4401, C4408 | | CEAS101M10 |
| | C1052, C4453 | | CEAS220M63 |
| | C1253 | | CEAS221M10 |
| | C1008, C1012 | | CEAS2R2M50 |
| | C4103, C4104, C4309, C4310, C8301 | | CEAS330M16 |
| | C8175, C8176, C8315 | | CEAS331M16 |
| | C1013 | | CEAS331M50 |
| | C4357 | | CEAS3R3M50 |
| | C1003, C1009, C1010, C4107, C4108 | | CEAS470M16 |
| | C4351, C4359, C4360 | | CEAS470M16 |
| | C1501, C1502, C4207, C4208 | | CEAS4R7M50 |
| | C4301, C4302, C4315, C4316, C8160 | | CEAS4R7M50 |
| | C8162 | | CEAS4R7M50 |
| | C4402, C4406 | | CEASR68M50 |
| | C1004 | | CEJA470M16 |
| | C8309 | | CEJAR47M50 |
| | C4604 | | CFTXA823J50 |
| | C2217, C2218, C4251–C4253 | | CKCYF473Z50 |
| | C2212 | | CKCYX104M16 |
| | C1005, C1006, C2203, C2209, C8171 | | CKSQYB102K50 |
| | C8321 | | CKSQYB102K50 |
| | C1227, C1228, C1992, C8157, C8164 | | CKSQYB103K50 |
| | C8167, C8169, C8218, C8308, C8361 | | CKSQYB103K50 |
| | C1007, C1011, C1221–C1224 | | CKSQYB104K25 |
| | C8302, C8303, C8362 | | CKSQYB104K25 |
| | C8306 | | CKSQYB152K50 |
| | C4313, C4314 | | CKSQYB182K50 |
| | C4307, C4308 | | CKSQYB273K50 |
| | C4352, C4354, C8170 | | CKSQYB332K50 |
| | C4305, C4306, C8156, C8168 | | CKSQYB333K50 |
| | C4356, C8172 | | CKSQYB472K50 |
| | C1233, C4111, C8307 | | CKSQYB473K25 |
| | C8155 | | CKSQYB561K50 |
| | C2208 | | CKSQYB562K50 |
| | C4105, C4106 | | CKSQYB682K50 |
| | C2210, C2211 | | CKSQYB822K50 |
| | C4311, C4312 | | CKSQYB823K25 |
| | C8207, C8210, C8215, C8219 | | CKSQYF103Z50 |
| | C2206, C2207, C4411, C8158, C8159 | | CKSQYF104Z25 |
| | C8161, C8163, C8220, C8420, C8421 | | CKSQYF104Z25 |
| | C1225, C1226, C4409, C4410 | | CQMA103J50 |
| | C4358 | | CQMA223J50 |
| | C2204, C2205 | | CQMA683J50 |
| | C4361 | | CQPA822J100 |
| **RESISTORS** | | | |
| | R4360 | | RD1/2PM151J |
| | R4353 | | RD1/2PM181J |
| | R4357 | | RD1/2PM4R7J |
| | R1051 | | RD1/4PMF272J |
| | R1223, R1224 | | RD1/4PMFL101J |
| | R1221, R1222 | | RD1/6PM100J |
| | R1990, R1992, R8651 | | RD1/6PM102J |
| | R1261, R1262, R4409, R4410, R4451 | | RD1/6PM103J |
| | R1982 | | RD1/6PM104J |
| | R4459 | | RD1/6PM105J |
| | R1253 | | RD1/6PM152J |
| | R1993, R4691 | | RD1/6PM222J |
| | R1021, R3704 | | RD1/6PM470J |
| | R1241, R3752 | | RD1/6PM473J |
| | R2118 | | RD1/6PM512J |
| | R1013, R1014 | | RD1/6PM560J |
| | R1263, R1264 | | RD1/6PM823J |
| | R1231, R1232 | | RS1LMF331J |
| | R1251, R1252 | | RS1PMFR22J |
| | VR4301, VR4302, VR4501 (4.7kΩ) | | PCP1028 |
| | VR4201–VR4204 (10kΩ) | | PCP1029 |
| | VR8151, VR8152 22kΩ) | | PCP1030 |
| | VR4351, VR4352 (220kΩ) | | PCP1033 |
| | Other Resistors | | RS1/10S□□□J |
| **OTHERS** | | | |
| | CN8131 | 12P FPC CONNECTOR | 12FMZ-ABT |
| | CN8202 | 4P MT CONNECTOR | 173981-4 |
| | | 10P CABLE HOLDER | 51063-1005 |
| | CN8205 | | 52147-0610 |
| | | 4P SPEAKER TERMINAL | AKE7001 |
| | | SMALL HEAT SINK | ANH-575 |
| | X8301 | XTAL RES | ASS7000 |
| | | (OSC)(33.8688MHz-700PPM) | |
| | CN4003 | 2P TOP POST (EH) | B2B-EH |
| | CN4002 | 3P TOP POST (EH) | B3B-EH |
| | CN4001 | 3P TOP POST (EH, RED) | B3B-EH-R |
| | CN1901 | FFC CONNECTOR 17P | HLEM17S-1 |
| | CN1902 | 26P FFC CONNECTOR | HLEM26S-1 |
| | CN1501 | 10P PLUG | KM200IB10 |
| | CN2102 | 14P PLUG | KM200IB14 |
| | CN1232 | 7P JUMPER CONNECTOR | KPE7 |
| | JA2101 | AUDIO 2P JACK | RKB1041 |
| | JA9001 | REMOTE CONTROL JACK | RKN1004 |
| | | PCB BINDER | VEF1008 |
| | CN8201 | 6P SIDE POST | VKN-004 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| **VOL. ASSY** | | | |
| SEMICONDUCTORS | | | |
| | IC1501 | | XRA4558F-P |
| CAPACITORS | | | |
| | C1553, C1554 | | CCSQCH101J50 |
| | C1551, C1552 | | CCSQCH220J50 |
| | C1503, C1504 | | CEAS2R2M50 |
| | C1557, C1558 | | CKSQYB104K25 |
| | C1550 | | CKSQYF104Z25 |
| | C1507, C1508 | | CKSQYF473Z50 |
| RESISTORS | | | |
| | VR1501 | | ACX1089 |
| | Other Resistors | | RS1/10S□□□J |
| OTHERS | | | |
| | CN1502 | | KP200IB10L |
| **SEC. ASSY** | | | |
| SEMICONDUCTORS | | | |
| | IC1006 | | ICP-N25 |
| | IC1001, IC1002 | | ICP-N50 |
| | Q1061 | | 2SC2412K |
| | D1016, D1017, D1061, D1062 | | 1SS254 |
| | D1001-D1004, D1201-D1204 | | S5688G |
| CAPACITORS | | | |
| | C1002 | | CEAS102M16 |
| | C1051 | | CEAS220M63 |
| | C1001 | | CEAS222M16 |
| | C1061 | | CEAS2R2M50 |
| | C1014 | | CQPA103J100 |
| RESISTORS | | | |
| | Other Resistors | | RS1/10S□□□J |
| OTHERS | | | |
| | | 10P CABLE HOLDER | 51063-1005 |
| **DISP. ASSY** | | | |
| SEMICONDUCTORS | | | |
| | IC3701 | | BA3835F |
| | IC1902 | | BU4094BCF |
| | IC1901 | | PDG165A |
| | Q1706-Q1708, Q1751, Q1752, Q4511 | | 2SA1037K |
| | Q4521 | | 2SA1037K |
| | Q4501 | | 2SB1197K |
| | Q1901 | | 2SC2412K |
| | Q4512, Q4522 | | 2SD1781K |
| | Q1801, Q1903, Q4513, Q4523 | | DTA124EK |
| | Q1904 | | DTC124EK |
| | Q1701-Q1704, Q1753, Q1902, Q4502 | | DTC143EK |
| | D1801-D1811, D1901-D1903 | | 1SS254 |
| | D1905, D1906, D1910, D4501 | | 1SS254 |
| | D4511-D4514, D4521-D4526 | | 1SS254 |
| | D1796, D1798 | | BR5064X |
| | D1791-D1795, D1797 | | MPG5064X |
| | D1904 | | MTZJ6.2B |
| COILS AND FILTERS | | | |
| | L1901 | | LAU220J |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| SWITCHES AND RELAYS | | | |
| | S1801-S1818, S1820, S1821 | | ASG1034 |
| CAPACITORS | | | |
| | C1901 | | ACH1246 |
| | C1914 | | CCSQCH221J50 |
| | C1903 | | CEAS470M16 |
| | C1701, C1908 | | CEJA100M50 |
| | C1910 | | CEJA220M25 |
| | C1907 | | CEJAR47M50 |
| | C1905 | | CKSQYB102K50 |
| | C3701, C3702, C3704 | | CKSQYB104K25 |
| | C1912 | | CKSQYB221K50 |
| | C1916, C3703 | | CKSQYF104Z25 |
| | C1902, C1904, C1906, C1909 | | CKSQYF473Z50 |
| RESISTORS | | | |
| | R9997 | | RA6T683J |
| | R9998, R9999 | | RA9T683J |
| | R1908, R1911, R1912, R1943-R1945 | | RD1/6PM102J |
| | R1947, R1948, R1998, R3706 | | RD1/6PM102J |
| | R3708-R3710 | | RD1/6PM102J |
| | R1906, R4514, R4524 | | RD1/6PM222J |
| | R1720-R1722 | | RD1/6PM332J |
| | R1905, R4513, R4523 | | RD1/6PM473J |
| | Other Resistors | | RS1/10S□□□J |
| OTHERS | | | |
| | | 9P CABLE HOLDER | 51063-0905 |
| | | 15P CABLE HOLDER | 51063-1505 |
| | V1901 | FL TUBE | AAV7025 |
| | | REMOTE RECEIVER UNIT | GP1U28X |
| | CN9101 | 17P FFC CONNECTOR | HLEM17R-1 |
| | CN9102 | 26P FFC CONNECTOR | HLEM26R-1 |
| | | FL HOLDER | VNF1087 |
| | X1902 | CERAMIC RESONATOR | EFOEC8004A4 |
| **EJECT ASSY** | | | |
| SWITCHES AND RELAYS | | | |
| | S1819 | | ASG1034 |
| **ILLUMI ASSY** | | | |
| SEMICONDUCTORS | | | |
| | D1751-D1754 | | GL1EG21 |
| | D1755 | | GL1HS21 |
| RESISTORS | | | |
| | Other Resistors | | RS1/10S□□□J |
| **PACK ASSY** | | | |
| SEMICONDUCTORS | | | |
| | IC1202 | | ICP-N25 |
| | IC1201 | | STK4142-2GP |
| CAPACITORS | | | |
| | C1215, C1216 | | CCSQCH101J50 |
| | C1211 | | CEANP220M50 |
| | C1213 | | CEANP470M50 |
| | C1209, C1210, C1212 | | CEAS100M50 |
| | C1207, C1208 | | CEAS101M25 |
| | C1205, C1206 | | CEJA220M25 |
| | C1203, C1204 | | CKSQYB222K50 |
| | C1219 | | CKSQYB473K25 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| **RESISTORS** | | | |
| | R1209–R1212, R1216, R1217 | | RD1/4PM222J |
| | R1207, R1208 | | RD1/4PM563J |
| | R1213, R1214 | | RD1/4PMFL101J |
| | R1215 | | RD1/4PMFL102J |
| | R1218 | | RD1/4PMFL471J |
| | Other Resistors | | RS1/10S□□□J |
| **OTHERS** | | | |
| | | 10P CABLE HOLDER | 51063–1005 |
| **PRI. ASSY** | | | |
| **COILS AND FILTERS** | | | |
| | L1101 | | ATF–163 |
| **CAPACITORS** | | | |
| | C1101 (0.01μF/250V) | | ACG7005 |
| **OTHERS** | | | |
| | H1101, H1102 | TAPING FUSE HOLDER | VKR1001 |
| **H.P. ASSY** | | | |
| **COILS AND FILTERS** | | | |
| | L1231 | | PTL1014 |
| **CAPACITORS** | | | |
| | C1231, C1232 | | CKSQYB102K50 |
| **OTHERS** | | | |
| | | 7P CABLE HOLDER | 51063–0705 |
| | CN1231 | CHIP CAPACITOR | AKN1028 |
| **FM/AM TUNER MODULE** | | | |
| **SEMICONDUCTORS** | | | |
| | IC6201 | | LA1836M |
| | IC6202 | | LM7001J |
| | Q6102 | | 2SC2223 |
| | Q6203 | | 2SC2235 |
| | Q6202, Q6218 | | 2SC2712 |
| | Q6103, Q6214 | | 2SC2714 |
| | Q6201 | | 2SK208 |
| | Q6104, Q6105 | | 2SK302 |
| | Q6101 | | 3SK194 |
| | Q6204 | | XDA124EK |
| | Q6217 | | XDC124EK |
| | D6101–D6104 | | 1SV228 |
| **COILS AND FILTERS** | | | |
| | L6106 | | ATC1003 |
| | L6105 | | ATC1015 |
| | L6101 | | ATC1016 |
| | L6102 | | ATC1017 |
| | L6103 | | ATC1018 |
| | L6104 | | ATC1019 |
| | L6207 (10.7MHz) | | ATE1013 |
| | F6204 | | ATF–107 |
| | F6203 | | ATF–119 |
| | X6202 (450kHz) | | ATF1027 |
| | F6205 | | ATF1152 |
| | F6202 (450kHz) | | ATF1155 |
| | L6107 (2.2μH) | | ATH1043 |
| | L6202, L6203, L6208 | | LCTA2R2J3225 |
| | L6205 | | LCTA680J3225 |
| **CAPACITORS** | | | |
| | C6204, C6234, C6236, C6269 (1μF/16V) | | ACG1051 |
| | C6120 | | CCSCH060D50 |
| | C6229 | | CCSCH102J50 |
| | C6111, C6122 | | CCSQCH010C50 |
| | C6112 | | CCSQCH020C50 |
| | C6118 | | CCSQCH080D50 |
| | C6113 | | CCSQCH101J50 |
| | C6116, C6208, C6221, C6222 | | CCSQCH150J50 |
| | C6117 | | CCSQCH330J50 |
| | C6272 | | CCSQSL330J50 |
| | C6105 | | CCSQSL471J50 |
| | C6101 | | CCSQTH110J50 |
| | C6119 | | CCSQTH150J50 |
| | C6109 | | CCSQTH270J50 |
| | C6107, C6110 | | CCSQTH300J50 |
| | C6106 | | CCSQTH330J50 |
| | C6261 | | CEAS010M50 |
| | C6224, C6231, C6233, C6246, C6262 | | CEAS100M50 |
| | C6227 | | CEAS101M10 |
| | C6216, C6217 | | CEAS330M16 |
| | C6219 | | CEAS470M10 |
| | C6243–C6245 | | CEAS470M16 |
| | C6238, C6248 | | CEJA100M16 |
| | C6249, C6250 | | CEJA4R7M35 |
| | C6215 | | CFTXA103J50 |
| | C6214 | | CFTXA224J50 |
| | C6115, C6125, C6126, C6207 | | CKSQYB102K50 |
| | C6102, C6114, C6121, C6124, C6210 | | CKSQYB103K50 |
| | C6264 | | CKSQYB103K50 |
| | C6247 | | CKSQYB122K50 |
| | C6213 | | CKSQYB223K50 |
| | C6230 | | CKSQYB273K50 |
| | C6228 | | CKSQYB472K50 |
| | C6209, C6237, C6267 | | CKSQYB473K50 |
| | C6251, C6252 | | CKSQYB562K50 |
| | C6212, C6218 | | CKSQYF103Z50 |
| | C6220, C6226, C6239, C6242 | | CKSQYF223Z50 |
| | C6255, C6256 | | CKSQYF223Z50 |
| | C6235 | | CKSQYF224Z25 |
| | C6225, C6241 | | CKSQYF473Z50 |
| | C6123 | | CKSYB103K50 |
| | C6232 | | CKSYB273K50 |
| | C6223 | | CKSYF103Z50 |
| | C6263 | | CKSYF473Z50 |
| **RESISTORS** | | | |
| | R6299, R6300 | | RD1/6PM102J |
| | R6115, R6119, R6123, R6127, R6129 | | RS1/8S000J |
| | R6268–R6271, R6275, R6276, R6278 | | RS1/8S000J |
| | R6283, R6284, R6293, R6294, R6297 | | RS1/8S000J |
| | R6302, R6303 | | RS1/8S000J |
| | R6243, R6244 | | RS1/8S101J |
| | R6211, R6239 | | RS1/8S103J |
| | R6237 | | RS1/8S122J |
| | R6209 | | RS1/8S221J |
| | R6112 | | RS1/8S473J |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | VR6201 (10kΩ) | | ACP1056 |
| | VR6202 | | VRTB6VS223 |
| | Other Resistors | | RS1/10S□□□J |
| OTHERS | | | |
| | BN6201 | 2P TERMINAL WITH PAL | AKA1017 |
| | CN6201 | 14P SOCKET | KP200IA14L |
| | X6203 (7.200MHz) | | ASS1042 |
| | X6201 (456kHz) | | ASS1066 |
| **SENSOR BOARD ASSY** | | | |
| SEMICONDUCTORS | | | |
| | Q601, Q602 | | PS3062 |
| RESISTORS | | | |
| | All Resistors | | RD1/6PM□□□J |
| **LED BOARD ASSY** | | | |
| SEMICONDUCTORS | | | |
| | D601, D602 | | AN306 |
| RESISTORS | | | |
| | All Resistors | | RD1/6PM□□□J |
| **SW BOARD ASSY** | | | |
| SWITCHES AND RELAYS | | | |
| | S601 | | DSG1017 |
| **MOTOR BOARD ASSY** | | | |
| | MOTOR BOARD ASSY has no service part. | | |
| **MECHANISM BOARD ASSY** | | | |
| SWITCHES AND RELAYS | | | |
| | S610 | | DSG1016 |
| OTHERS | | | |
| | CN610 | MT CONNECTOR (4P) | 173979-4 |

# ■ FOR XR-P160/DD

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| **LIST OF PCB ASSEMBLIES** | | | |
| NSP | COMP. ASSY | | AWM7198 |
| | ├ AF ASSY | | AWZ8106 |
| | ├ VOL. ASSY | | AWZ8108 |
| | ├ SEC. ASSY | | AWZ8110 |
| | ├ DISP. ASSY | | AWZ8113 |
| | ├ ILLUMI. ASSY | | AWZ8115 |
| | ├ EJECT ASSY | | AWZ8116 |
| | ├ PACK ASSY | | AWZ8118 |
| | ├ PRI. ASSY | | AWZ8121 |
| NSP | └ H.P. ASSY | | AWZ8299 |
| | FM/AM TUNER MODULE | | AXQ3112 |
| NSP | CD SLOT-IN MECHANISM UNIT | | AXA7014 |
| NSP | ├ SL MECHANISM BOARD ASSY | | AWX7007 |
| NSP | │ ├ SENSOR BOARD ASSY | | AWZ7328 |
| NSP | │ ├ LED BOARD ASSY | | AWZ7329 |
| NSP | │ ├ SW BOARD ASSY | | AWZ7330 |
| NSP | │ └ MOTOR BOARD ASSY | | AWZ7331 |
| NSP | └ SERVO MECHANISM ASSY SL | | AXA7017 |
| NSP | └ MECHANISM BOARD ASSY | | PWX1192 |
| **AF ASSY** | | | |
| SEMICONDUCTORS | | | |
| | IC4101 | | BU4066BCF |
| | IC1981, IC1982 | | BU4094BCF |
| | IC4401 | | CXA1101P |
| | IC8151 | | CXA1372Q |
| | IC8301 | | CXD2508AQ |
| ⚠ | IC8201, IC8202 | | LA6520 |
| ⚠ | IC1004 | | NJM78M12FA |
| ⚠ | IC1003 | | NJM78M56FA |
| | IC2201 | | PM0006A |
| | IC2102, IC3702, IC4102, IC4301, IC8401 | | XRA4558F-P |
| | IC2101 | | XRU4052BCF |
| | Q1004, Q1007, Q1011, Q1254, Q1981 | | 2SA1037K |
| | Q4351 | | 2SB1197K |
| | Q1010, Q1051 | | 2SB1238X |
| | Q1001 | | 2SB1375 |
| | Q1013 | | 2SC2235 |
| | Q4356 | | 2SC2240 |
| | Q1003, Q1005, Q1008, Q1253 | | 2SC2412K |
| | Q1255, Q1256, Q1501, Q1502 | | 2SC2412K |
| | Q4101, Q4102, Q4203–Q4206 | | 2SC2412K |
| | Q4301, Q4302, Q4401, Q4402 | | 2SC2412K |
| | Q4451–Q4454, Q8401, Q8402 | | 2SC2412K |
| | Q1009, Q4353, Q4354 | | 2SD1781K |
| | Q1002 | | 2SD2012 |
| | Q4355 | | 2SD2144S |
| | Q8301 | | 2SK246 |
| | Q4307, Q4308 | | 2SK373 |
| | Q1006, Q1241, Q1503, Q4357, Q4403 | | DTA124EK |
| | Q4457, Q4458, Q4691 | | DTA124EK |
| | Q1251, Q4208, Q4456, Q8302 | | DTA143EK |
| | Q8403, Q8404 | | DTA143EK |
| | Q4305, Q4306, Q4692 | | DTC124EK |
| | Q1252, Q4207, Q4352, Q4455 | | DTC143EK |
| | D4301–D4304 | | 1SS135 |
| ⚠ | D1054 | | 1SS254 |
| | D1251, D1981–D1985, D4201, D4202 | | 1SS254 |
| | D4305, D4306, D4451, D4452, D4601 | | 1SS254 |
| ⚠ | D4691–D4693 | | 1SS254 |
| | D8301, D8302 | | 1SS254 |

• This diagram is viewed from the mounted parts side.

PCB – 1

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

| Symbol in PCB Diagrams | Symbol in Schematic Diagrams | Part Name |
|---|---|---|
| Q504 (E, Q504) | Q504 Q504 | Transistor |
| D203 D203 | D203 | Diode |
| C513 C513 | C513 | Capacitor (Polarized) |

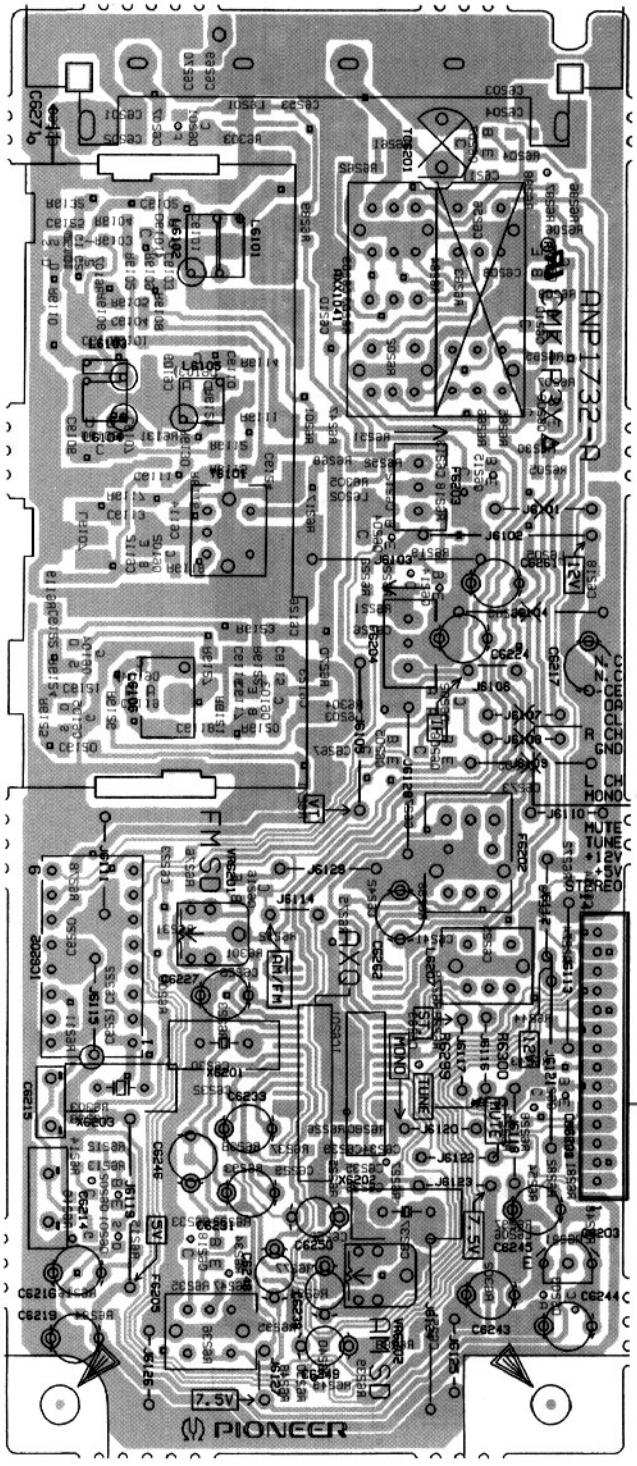
3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ⓓ or ⊐ shows cathode side.
5. The capacitor terminal marked with ⓒ or ⊏ shows negative terminal.

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

| Symbol in PCB Diagrams | Symbol in Schematic Diagrams | Part Name |
|---|---|---|
| B C E | B C E B C E | Transistor |
| B C E | B C E B C E | Transistor with resistor |
| D G S | D G S D G S | Field effect transistor |
| | | Resistor array |
| | | 3- terminal regulator |

## FM/AM TUNER MODULE




Q6101
Q6204
Q6102
Q6214
Q6104
Q6103
Q6105
VR6201
IC6202
IC6201
Q6217
Q6202
Q6201
Q6218
Q6203
VR6202

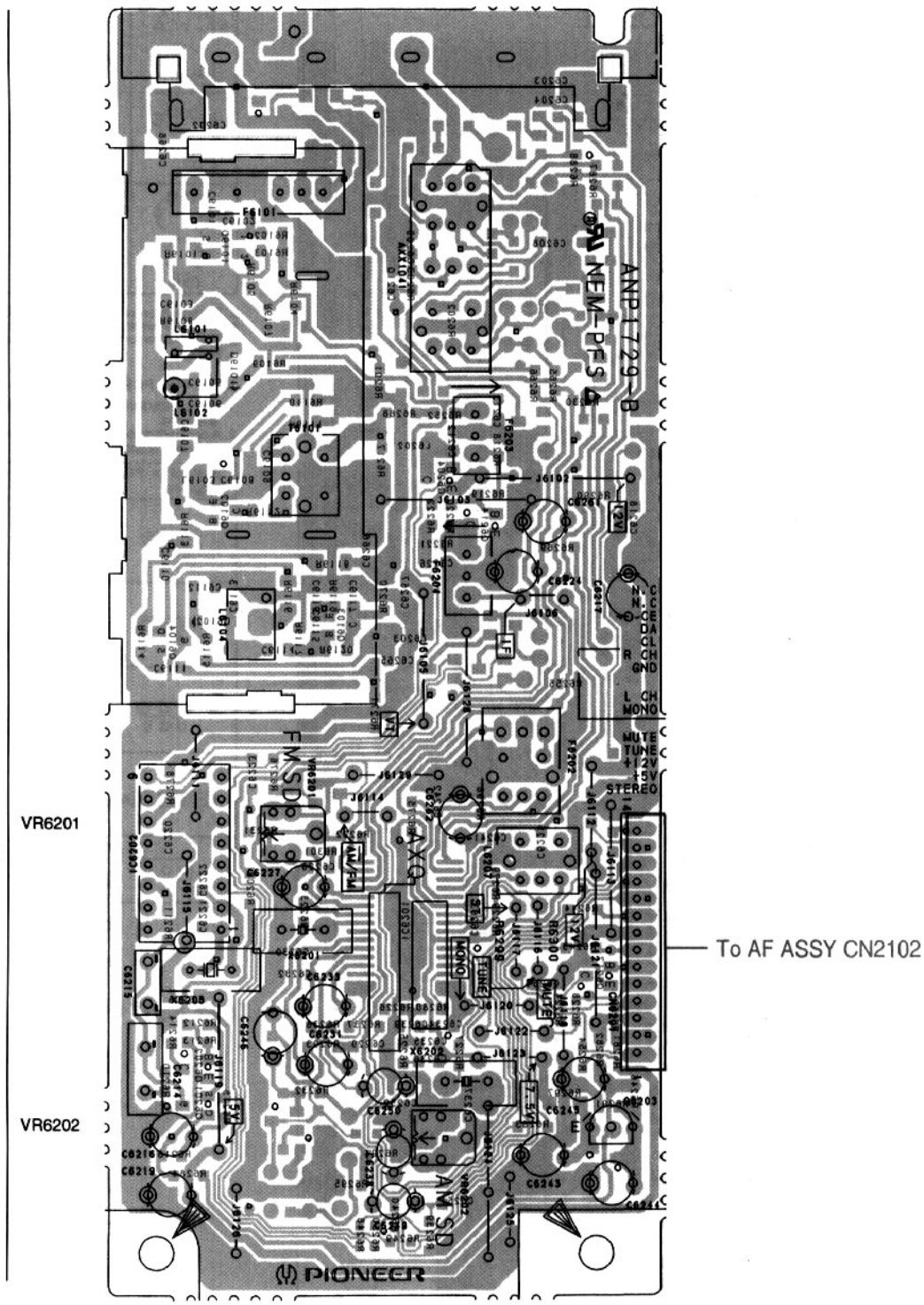
To AF ASSY CN2102

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

PCB – 2

## ● For DD type (AXQ3112)

FM/AM TUNER MODULE




● This diagram is viewed from the mounted parts side.

FM/AM TUNER MODULE (AXQ3112-DD)

SCH-3

NOTE: VOLTAGE AND CURRENT

mV Signal voltage at FM 1kHz, 100% MOD

or ←V

DC voltage (V) at no input signal unless otherwise noted

Value in ( ) is DC voltage at rated power.

⇦mA or ←mA

DC current at no input signal unless otherwise noted

SIGNAL ROUTE

(TX) TUNER AUDIO SIGNAL ROUTE

(AM) AM SIGNAL ROUTE

(FM) FM SIGNAL ROUTE

FM F.E.

RF AMP Q6101 3SK194-TL

MIX AMP Q6102 2SC2223-TL

Q6214 IF AMP

Q6214 2SC2714-TL

F6101 ATF-155

T6101 ATE-063-O-M

IF OUT

OSC Q6103 2SC2714-TL

Q6104 BUFFER AMP

Q6104 2SK302-TL

ANT

AGC

RF VT

OSC +B

MAIN +B

LOCAL OUT

OSC VT

FM SD ADJ.

IC6201 FM/AM IF DETECTION FM STEREO DECODER

IC6201 LA1836M IF+MPX

CN6201 KP2001A14L

N C
N.C.
CE
DA
CL
R CH
GND
L CH
MONO
MUTE
TUNE
+12V
+5V
STEREO

TO AF ASSY (1/3) CN2102 (SCH-5)

FM +B SW Q6204 XDA124EK-TL

FM

FM 75ohm

AM

AXX1025

AM RF TUNING BLOCK

TP1 VT

Q6201 2SK208-TL

Q6202 2SC2712-TL

Q6201, Q6202 PLL LOOP FILTER DC AMP

IC6202 LM7001J PLL

IC6202 PLL IC

TP2 T-meter

TP3 T-meter

TP4 S-meter

AM SD ADJ.

F6202 ATF1155-A

L6207

ATE1013-B

FORCED MONO DRIVE Q6217 XDC124EK-TL

CONSTANT-VOLTAGE POWER SUPPLY Q6203 2SC2235-T

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| ⚠ | D1053 | | MTZJ36A |
| ⚠ | D1007 | | MTZJ5.6B |
| ⚠ | D1008 | | MTZJ6.2B |
| | D8218 | | MTZJ6.2B |
| ⚠ | D1055 | | MTZJ6.8A |
| | D1011–D1014, D1051, D1052, D1207 | | S5688G |
| | D1253 | | S5688G |

## COILS AND FILTERS

| | | |
|---|---|---|
| L1201, L1202 (1μH) | | ATH–133 |
| L4351 [4.05μH, (105kHz)] | | ATX7002 |
| L1981 | | LAU100J |
| L8321 | | LAU1R2J |
| L4301, L4302 | | LTA472J |
| L4303, L4304 | | LTA822J |
| F4401, F4402 | | RTF1209 |

## SWITCHES AND RELAYS

| | | |
|---|---|---|
| RY1251(12V) | | ASR7007 |

## CAPACITORS

| | | |
|---|---|---|
| C1201, C1202 (2200μF/42V) | | ACH1109 |
| C4362 | | CCCSL151K500 |
| C4319, C4320 | | CCCSL271K500 |
| C4323, C4324, C8322 | | CCSQCH100D50 |
| C4391, C4392, C8311–C8313 | | CCSQCH101J50 |
| C8407–C8410 | | CCSQCH121J50 |
| C3705 | | CCSQCH151J50 |
| C4601, C8323 | | CCSQCH220J50 |
| C8403–C8406 | | CCSQCH271J50 |
| C4109, C4110, C8401, C8402 | | CCSQCH391J50 |
| C4101, C4102 | | CCSQCH471J50 |
| C4151, C4152 | | CCSQCH681J50 |
| C8411, C8412 | | CEANP2R2M50 |
| C4303, C4304, C4451, C4452, C8314 | | CEAS010M50 |
| C1053, C1054, C1252, C1505, C1506 | | CEAS100M50 |
| C4364, C4403–C4405, C4407, C4454 | | CEAS100M50 |
| C4401, C4408 | | CEAS101M10 |
| C1052, C4453 | | CEAS220M63 |
| C1253 | | CEAS221M10 |
| C1008, C1012 | | CEAS2R2M50 |
| C4103, C4104, C4309, C4310, C8301 | | CEAS330M16 |
| C8175, C8176, C8315 | | CEAS331M16 |
| C1013 | | CEAS331M50 |
| C4357 | | CEAS3R3M50 |
| C1003, C1004, C1009, C1010 | | CEAS470M16 |
| C4107, C4108, C4351, C4359, C4360 | | CEAS470M16 |
| C1501, C1502, C4207, C4208 | | CEAS4R7M50 |
| C4301, C4302, C4315, C4316, C8160 | | CEAS4R7M50 |
| C8162 | | CEAS4R7M50 |
| C4402, C4406 | | CEASR68M50 |
| C8309 | | CEJAR47M50 |
| C4604 | | CFTXA823J50 |
| C4251 | | CKCYF473Z50 |
| C2212 | | CKCYX104M16 |
| C1005, C1006, C2203, C2209, C8171 | | CKSQYB102K50 |
| C8321 | | CKSQYB102K50 |
| C1992, C8157, C8164, C8167, C8169 | | CKSQYB103K50 |
| C8218, C8308, C8361 | | CKSQYB103K50 |
| C1007, C1011, C1221–C1224 | | CKSQYB104K25 |
| C8302, C8303, C8362 | | CKSQYB104K25 |
| C8306 | | CKSQYB152K50 |
| C4313, C4314 | | CKSQYB182K50 |
| C4307, C4308 | | CKSQYB273K50 |
| C4352, C4354, C8170 | | CKSQYB332K50 |
| C4305, C4306, C8156, C8168 | | CKSQYB333K50 |
| C4356, C8172 | | CKSQYB472K50 |
| C4111, C8307 | | CKSQYB473K25 |
| C8155 | | CKSQYB561K50 |
| C2208 | | CKSQYB562K50 |
| C4105, C4106 | | CKSQYB682K50 |
| C2210, C2211 | | CKSQYB822K50 |
| C4311, C4312 | | CKSQYB823K25 |
| C8207, C8210, C8215, C8219 | | CKSQYF103Z50 |
| C2206, C2207, C8158, C8159, C8161 | | CKSQYF104Z25 |
| C8163, C8220, C8420, C8421 | | CKSQYF104Z25 |
| C4409, C4410 | | CQMA103J50 |
| C4358 | | CQMA223J50 |
| C2204, C2205 | | CQMA683J50 |
| C4361 | | CQPA822J100 |

## RESISTORS

| | | |
|---|---|---|
| R4360 | | RD1/2PM151J |
| R4353 | | RD1/2PM181J |
| R4357 | | RD1/2PM4R7J |
| R1051 | | RD1/4PMF272J |
| R1223, R1224 | | RD1/4PMFL100J |
| R1221, R1222 | | RD1/6PM100J |
| R1990, R1992, R8651 | | RD1/6PM102J |
| R1261, R1262, R4409, R4410, R4451 | | RD1/6PM103J |
| R1982 | | RD1/6PM104J |
| R4459 | | RD1/6PM105J |
| R1253 | | RD1/6PM152J |
| R1993, R4691 | | RD1/6PM222J |
| R1021, R3704 | | RD1/6PM470J |
| R1241, R3752 | | RD1/6PM473J |
| R2118 | | RD1/6PM512J |
| R1013, R1014 | | RD1/6PM560J |
| R1263, R1264 | | RD1/6PM823J |
| R1231, R1232 | | RS1LMF331J |
| R1251, R1252 | | RS1PMFR22J |
| VR4301, VR4302, VR4501 (4.7kΩ) | | PCP1028 |
| VR4201–VR4204 (10kΩ) | | PCP1029 |
| VR8151, VR8152 (22kΩ) | | PCP1030 |
| VR4351, VR4352 (220kΩ) | | PCP1033 |
| Other Resistors | | RS1/10S□□□J |

## OTHERS

| | | |
|---|---|---|
| CN8131 | 12P FPC CONNECTOR | 12FMZ–ABT |
| CN8202 | MT 4P CONNECTOR | 173981–4 |
| | 10P CABLE HOLDER | 51063–1005 |
| CN8205 | 6P JUMPER CONNECTOR | 52147–0610 |
| | SPEAKER TERMINAL 4Å P | AKE7001 |
| | SMALL HEAT SINK | ANH–575 |
| X8301 (33.8688Mz) | | ASS7000 |
| CN4003 | 2P TOP POST | B2B–EH |
| CN4002 | 3P TOP POST | B3B–EH |
| CN4001 | 3P TOP POST(RED) | B3B–EH–R |
| C1233 | CERAMIC CAPACITOR | CKSQYB473K25 |
| C4411 | CERAMIC CAPACITOR | CKSQYF104Z25 |
| CN1901 | 17P FFC CONNECTOR | HLEM17S–1 |
| CN1902 | 26P FFC CONNECTOR | HLEM26S–1 |
| CN1501 | 10P PLUG | KM200IB10 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | CN2102 | 14P PLUG | KM200IB14 |
| | CN1232 | 7P JUMPER CONNECTOR | KPE7 |
| ⚠ | D1018–D1020 | ZINER DIODE | MTZJ8.2A |
| | JA2101 | PIN JACK 2P | RKB1041 |
| | JA9001 | REMOTE CONTROL JACK | RKN1004 |
| | D4551–D4553 | DIODE | S5688G |
| | | PCB BINDER | VEF1008 |
| | JA1301 | PIN JACK 2P | VKB1060 |
| | CN8201 | 6P SIDE POST | VKN-004 |

## VOL. ASSY

### SEMICONDUCTORS

| | | |
|---|---|---|
| | IC1501 | XRA4558F-P |

### CAPACITORS

| | |
|---|---|
| C1503, C1504 | CEAS2R2M50 |
| C1557, C1558 | CKSQYB104K25 |
| C1550 | CKSQYF104Z25 |
| C1507, C1508 | CKSQYF473Z50 |

### RESISTORS

| | |
|---|---|
| VR1501 (100K-3B x 2) | ACX1089 |
| Other Resistors | RS1/10S□□□J |

### OTHERS

| | | |
|---|---|---|
| | CN1502 | 10P SOCKET | KP200IB10L |

## SEC. ASSY

### SEMICONDUCTORS

| | | |
|---|---|---|
| ⚠ | IC1006 | ICP-N25 |
| ⚠ | IC1001, IC1002 | ICP-N50 |
| | Q1061 | 2SC2412K |
| | D1016, D1017, D1061, D1062 | 1SS254 |
| | D1001–D1004, D1201–D1204 | S5688G |

### CAPACITORS

| | |
|---|---|
| C1002 | CEAS102M16 |
| C1051 | CEAS220M63 |
| C1001 | CEAS222M16 |
| C1061 | CEAS2R2M50 |

### RESISTORS

| | |
|---|---|
| All Resistors | RS1/10S□□□J |

### OTHERS

| | | |
|---|---|---|
| | 10P CABLE HOLDER | 51063-1005 |

## DISP. ASSY

### SEMICONDUCTORS

| | |
|---|---|
| IC3701 | BA3835F |
| IC1902 | BU4094BCF |
| IC1901 | PDG165A |
| IC2501 | XRA4558F-P |
| Q1706–Q1708, Q1751, Q1752, Q4511 | 2SA1037K |
| Q4521 | 2SA1037K |
| Q4501 | 2SB1197K |
| Q1901 | 2SC2412K |
| Q4512, Q4522 | 2SD1781K |
| Q1903, Q4513, Q4523 | DTA124EK |
| Q1904 | DTC124EK |
| Q1701–Q1704, Q1753, Q1902, Q4502 | DTC143EK |
| D1801–D1812, D1901–D1903 | 1SS254 |
| D1905, D1906, D1910, D4501 | 1SS254 |
| D4511–D4514, D4521–D4526 | 1SS254 |
| D1796, D1798 | BR5064X |
| D1791–D1795, D1797 | MPG5064X |
| D1904 | MTZJ6.2B |

### COILS AND FILTERS

| | |
|---|---|
| L1901 | LAU220J |

### SWITCHES AND RELAYS

| | |
|---|---|
| S1801–S1818, S1820, S1821 | ASG1034 |

### CAPACITORS

| | |
|---|---|
| C1901 | ACH1246 |
| C2504 | CCSQCH221J50 |
| C1903 | CEAS470M16 |
| C1701, C1908, C2503, C2505, C2510 | CEJA100M50 |
| C1910 | CEJA220M25 |
| C1907 | CEJAR47M50 |
| C1905 | CKSQYB102K50 |
| C3701, C3702, C3704 | CKSQYB104K25 |
| C2501 | CKSQYB122K50 |
| C1912 | CKSQYB221K50 |
| C2511 | CKSQYB472K50 |
| C2507, C2508 | CKSQYB473K25 |
| C2506 | CKSQYB682K50 |
| C3703 | CKSQYF104Z25 |
| C1902, C1904, C1906, C1909 | CKSQYF473Z50 |

### RESISTORS

| | |
|---|---|
| R9997 | RA6T683J |
| R9998, R9999 | RA9T683J |
| R1908, R1911, R1912, R1943–R1945 | RD1/6PM102J |
| R1947, R1948, R1998, R3706 | RD1/6PM102J |
| R3708–R3710 | RD1/6PM102J |
| R1906, R4514, R4524 | RD1/6PM222J |
| R1720–R1722 | RD1/6PM332J |
| R1905, R4513, R4523 | RD1/6PM473J |
| VR2501(10K-B) | ACS1048 |
| Other Resistors | RS1/10S□□□J |

### OTHERS

| | | |
|---|---|---|
| | 9P CABLE HOLDER | 51063-0905 |
| | 15P CABLE HOLDER | 51063-1505 |
| V1901 | FL TUBE | AAV7025 |
| JA2501 | VARIABLE(10K x 1) | AKN7004 |
| C1914 | CHIP CERAMIC C. | CCSQCH221J50 |
| C1916 | CERAMIC CAPACITOR | CKSQYF104Z25 |
| Q1801 | CHIP DIGITAL TRANS. | DTA124EK |
| | REMOTE RECEIVER UNIT | GP1U28X |
| CN9101 | 17P FFC CONNECTOR | HLEM17R-1 |
| CN9102 | 26P FFC CONNECTOR | HLEM26R-1 |
| L2501 | AXIAL INDUCTOR | LAU100J |
| | FL HOLDER | VNF1087 |
| X1902 | CERAMIC RESONATOR | EFOEC8004A4 |

## ILLUMI. ASSY

### SEMICONDUCTORS

| | |
|---|---|
| D1751, D1752 | GL1EG21 |
| D1753, D1754 | GL1HS21 |
| D1755 | GL1PR21 |

### RESISTORS

| | |
|---|---|
| All Resistors | RS1/10S□□□J |

## EJECT ASSY

### SWITCHES AND RELAYS

| | |
|---|---|
| S1819 | ASG1034 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| **PACK ASSY** | | | |
| SEMICONDUCTORS | | | |
| ⚠ | IC1202 | | ICP-N25 |
| ⚠ | IC1201 | | STK4142-2GP |
| CAPACITORS | | | |
| | C1211 | | CEANP220M50 |
| | C1213 | | CEANP470M50 |
| | C1209, C1210, C1212 | | CEAS100M50 |
| | C1207, C1208 | | CEAS101M25 |
| | C1205, C1206 | | CEJA220M25 |
| | C1203, C1204 | | CKSQYB222K50 |
| RESISTORS | | | |
| | R1209-R1212, R1216, R1217 | | RD1/4PM222J |
| | R1207, R1208 | | RD1/4PM563J |
| | R1213, R1214 | | RD1/4PMFL101J |
| | R1215 | | RD1/4PMFL102J |
| | R1218 | | RD1/4PMFL471J |
| | Other Resistors | | RS1/10S□□□J |
| OTHERS | | | |
| | | 10P CABLE HOLDER | 51063-1005 |
| **PRI. ASSY** | | | |
| SWITCHES AND RELAYS | | | |
| ⚠ | S1101 | | AKX7003 |
| CAPACITORS | | | |
| ⚠ | C1101 (0.01μF/250V) | | ACG7005 |
| OTHERS | | | |
| | H1101-H1104 | | VKR1001 |
| **H.P. ASSY** | | | |
| RESISTORS | | | |
| | Other Resistors | | RS1/10S□□□J |
| OTHERS | | | |
| | | 7P CABLE HOLDER | 51063-0705 |
| | CN1231 | AKN1028 | |
| **FM/AM TUNER MODULE** | | | |
| SEMICONDUCTORS | | | |
| | IC6201 | | LA1836M |
| | IC6202 | | LM7001J |
| | Q6102 | | 2SC2223 |
| | Q6203 | | 2SC2235 |
| | Q6202 | | 2SC2712 |
| | Q6103, Q6214 | | 2SC2714 |
| | Q6201 | | 2SK208 |
| | Q6104 | | 2SK302 |
| | Q6101 | | 3SK194 |
| | Q6204 | | XDA124EK |
| | Q6217 | | XDC124EK |
| | D6101, D6102 | | 1T33 |
| COILS AND FILTERS | | | |
| | L6104 | | ATC1003 |
| | L6101 | | ATC1020 |
| | L6102 | | ATC1021 |
| | T6101 | | ATE-063 |
| | L6207 (10.7MHz) | | ATE1013 |
| | F6203, F6204 | | ATF-119 |
| | F6101 | | ATF-155 |
| | F6202 (450kHz) | | ATF1155 |
| | L6103 (2.2 μH) | | ATH1043 |
| | L6202, L6203, L6208 | | LCTA2R2J3225 |
| CAPACITORS | | | |
| | C6202, C6234, C6236 (1μF/16V) | | ACG1051 |
| | C6107 | | CCSCH010C50 |
| | C6229 | | CCSCH821J50 |
| | C6110 | | CCSQCH020C50 |
| | C6101 | | CCSQCH050C50 |
| | C6108, C6203, C6268 | | CCSQCH101J50 |
| | C6111, C6116, C6208, C6221, C6222 | | CCSQCH150J50 |
| | C6115 | | CCSQCH330J50 |
| | C6114 | | CCSQRH080D50 |
| | C6113 | | CCSQRH180J50 |
| | C6105 | | CCSQTH150J50 |
| | C6261 | | CEAS010M50 |
| | C6224, C6246, C6262 | | CEAS100M50 |
| | C6227 | | CEAS101M10 |
| | C6216, C6217 | | CEAS330M16 |
| | C6231, C6233 | | CEAS3R3M50 |
| | C6219 | | CEAS470M10 |
| | C6243-C6245 | | CEAS470M16 |
| | C6238 | | CEJA100M16 |
| | C6249, C6250 | | CEJA4R7M35 |
| | C6215 | | CFTXA103J50 |
| | C6214 | | CFTXA224J50 |
| | C6103, C6106, C6112, C6204 | | CKSQYB102K50 |
| | C6102, C6109, C6117, C6210, C6264 | | CKSQYB103K50 |
| | C6213 | | CKSQYB223K50 |
| | C6230 | | CKSQYB333K50 |
| | C6228, C6252 | | CKSQYB472K50 |
| | C6209, C6237, C6265, C6267 | | CKSQYB473K50 |
| | C6212, C6218 | | CKSQYF103Z50 |
| | C6220, C6226, C6239, C6242, C6255 | | CKSQYF223Z50 |
| | C6235 | | CKSQYF224Z25 |
| | C6225, C6241, C6266 | | CKSQYF473Z50 |
| | C6232 | | CKSYB333K50 |
| | C6251 | | CKSYB472K50 |
| | C6223 | | CKSYF103Z50 |
| | C6263 | | CKSYF473Z50 |
| RESISTORS | | | |
| | VR6201 (10kΩ) | | ACP1056 |
| | VR6202 | | VRTB6VS223 |
| | R6299, R6300 | | RD1/8PM102J |
| | R6113, R6116, R6118, R6268-R6271 | | RS1/8S000J |
| | R6275, R6276, R6278, R6283, R6284 | | RS1/8S000J |
| | R6290, R6293, R6294, R6297 | | RS1/8S000J |
| | R6243, R6244 | | RS1/8S101J |
| | R6211 | | RS1/8S103J |
| | R6237 | | RS1/8S182J |
| | R6209 | | RS1/8S221J |
| | R6239 | | RS1/8S332J |
| | R6101 | | RS1/8S470J |
| | Other Resistors | | RS1/10S□□□J |
| OTHERS | | | |
| | BN6201 | TERMINAL 4-P | AKA1016 |
| | X6203 (7.200MHz) | | ASS1042 |
| | X6201 (456kHz) | | ASS1066 |
| | X6202 (450kHz) | | ATF1027 |
| | | AM RF TUNING BLOCK | AXX1025 |
| | CN6201 | 14P SOCKET | KP200IA14L |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| **SENSOR BOARD ASSY** | | | |
| SEMICONDUCTORS | | | |
| | Q601, Q602 | | PS3062 |
| RESISTORS | | | |
| | All Resistors | | RD1/6PM□□□J |
| **LED BOARD ASSY** | | | |
| SEMICONDUCTORS | | | |
| | D601, D602 | | AN306 |
| RESISTORS | | | |
| | All Resistors | | RD1/6PM□□□J |
| **SW BOARD ASSY** | | | |
| SWITCHES AND RELAYS | | | |
| | S601 | | DSG1017 |
| **MOTOR BOARD ASSY** | | | |
| | MOTOR BOARD ASSY has no service part. | | |
| **MECHANISM BOARD ASSY** | | | |
| SWITCHES AND RELAYS | | | |
| | S610 | | DSG1016 |
| OTHERS | | | |
| | CN610 | MT CONNECTOR (4P) | 173979-4 |

# 5. ADJUSTMENTS

## 5.1 TUNER SECTION

### ■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1–1.

- For DD type (AXQ3112)

| Step No. | Adjustment Title | FM SG (1kHz, ±75kHz dev.) | | Reception Frequency Display | Adjustment Location | Specifications |
|---|---|---|---|---|---|---|
| | | Frequency (MHz) | Level (dBμV) | | | |
| 1 | Center Adjustment | 98 Non modulation | 80 or more | 98MHz | L6207 | Adjust so that the DC voltage between IC6201–Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV. |
| 2 | Front End Sencitivity | 98 | 0–30 | 98MHz | L6102 T6101 | Adjust so that the DC voltage between the IC6201–Pin 12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level. |
| 3 | Stereo Distortion | 98 | 80 | 98MHz | T6101 | Minimize the distortion with 1/8 rotation of the core. |
| 4 | TUNED IND. Lighting Level | 98 | 15±2 | 98MHz | VR6201 | Adjust so that the indicator of TUNED IND. starts to light up. |

*Notes:*

- *Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM →FM.*

- For NVXK, MYIXK, MYXK/EA and MYXK/EB types (AXQ3214)

| Step No. | Adjustment Title | FM SG (1kHz, ±75kHz dev.) | | Reception Frequency Display | Adjustment Location | Specifications |
|---|---|---|---|---|---|---|
| | | Frequency (MHz) | Level (dBμV) | | | |
| 1 | Center Adjustment | 98 Non modulation | 80 or more | 98MHz | L6207 | Adjust so that the DC voltage between IC6201–Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV. |
| 2 | Front End Sencitivity | 106 | 0–30 | 106MHz | L6104 L6105 L6102 T6101 | After adjusting L6104 and L6105 so that the DC voltage between LC6201–Pin12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level, adjust T6101 and L6102. |
| 3 | Stereo Distortion | 98 | 80 | 98MHz | T6101 | Minimize the distortion with 1/8 rotation of the core. |
| 4 | TUNED IND. Lighting Level | 98 | 15±2 | 98MHz | VR6201 | Adjust so that the indicator of TUNED IND. starts to light up. |

*Notes:*

- *Before adjusting, make sure there is no gap between L6101 and L6102 and between L6103 and L6104. If there is a gap between them, bring them into contact with each other first, and then make adjustments.*
- *Make indicator adjustments in order of AM →FM.*
- *Adjustment sequence: L6104 → L6105 → L6102 → T6101*

## ■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1–1.
- For NVXK, MYIXK, MYXK/EA, MYXK/EB and DD types (AXQ3112 and AXQ3214)

| Step No. | Adjustment Title | AM SG (400Hz, 30% Mod.) | | Reception Frequency Display | Adjustment Location | Specifications |
|---|---|---|---|---|---|---|
| | | Frequency (kHz) | Level (dBμV/m) | | | |
| 1 | TUNED IND. Lighting Level | 999 *1 | 47±2 | 999kHz *1 | VR6202 | Adjust so that the indicator of TUNED IND. starts to light up. |

*Notes:*

- *When DD type is used, set the AM frequency step to 10 kHz.*

**1: For the area using 10kHz step, frequencies should be 1000 kHz*

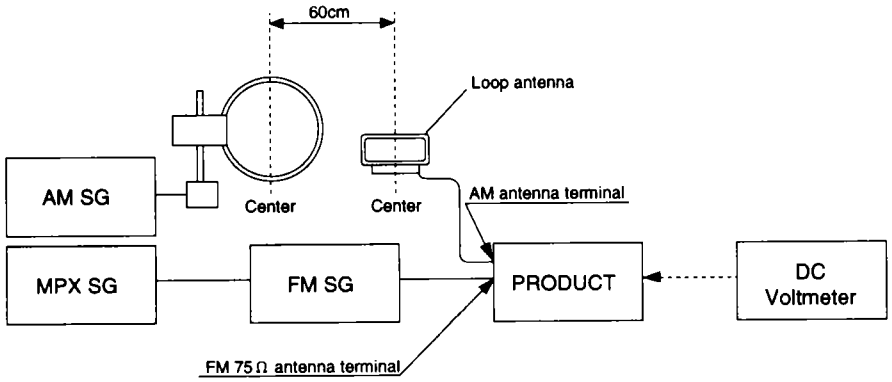
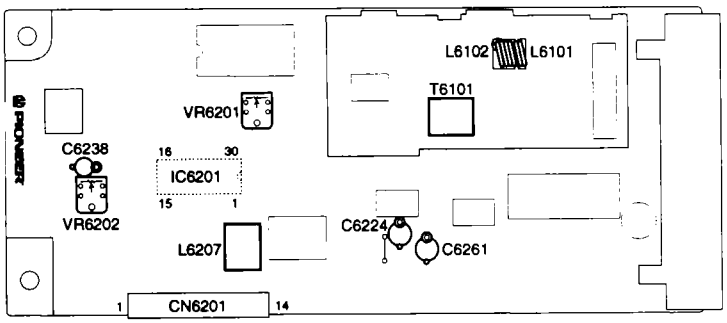



Fig. 1–1 AM and FM Adjustment Wiring Diagram

FM/AM TUNER MODULE (AXQ3112)




FM/AM TUNER MODULE (AXQ3214)

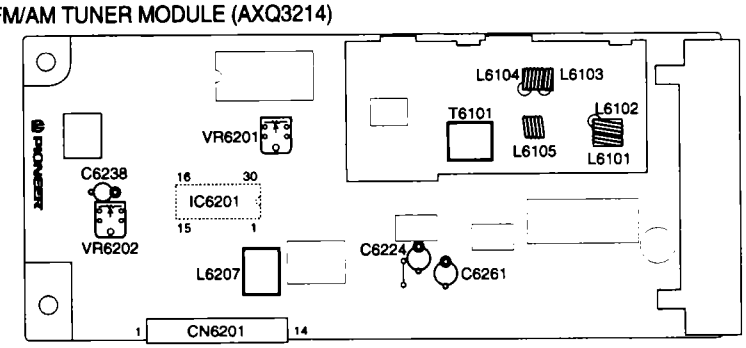



Fig. 1–2 Adjustment Points

# 5.2 CASSETTE DECK SECTION

• Adjustment points and test points are shown in Fig. 2–2 and Fig. 2–5.

## ■ Mechanical Adjustment

• Set the TAPE function.
• Test tape: STD–301 (3kHz, 30min).

1. Tape Speed Adjustment

| No. | Mode | Test Tape | Adjusting Points | Measurement Points | Adjustment Procedure | Remarks |
|---|---|---|---|---|---|---|
| 1 | Deck I PLAY | STD–301 (Playback: 3kHz) | AF Assy VR4501 | TAPE TEST POINT (Rch) (AF Assy) | Press the PLAY SW and adjust so that the reading becomes 3000Hz ±20Hz. Confirm that wow & flutter level is below 0.2% (in the reverse direction, confirm that the reading is within 3000Hz ±60Hz). | |

## ■ Electrical Adjustment

Check the following before starting.

1. Confirm that the tape speed adjustment has been completed.
2. Clean the heads and demagnetize them using a head eraser.
3. Set the measurement level to 0 dBV = 1 Vrms.
4. Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
   STD–331E: For playback adjustment
   STD–631or STD–632: Normal blank tape
5. Provide yourself with the following measuring devides:
   • AC millivoltmeter
   • Low-frequency oscillator
   • Attenuator
   • Oscilloscope
6. Adjust both right and left channels unless otherwise specified.
7. Turn the DOLBY NR switch off unless otherwize specified.
8. Warm up the unit for several minutes before adjustment. In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
9. Always follow the indicated adjustment order. Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

1. Head Azimuth Adjustment
2. Playback Level Adjustment

Recording Adjustment (Deck II)

1. Bias Oscillation Frequency Adjustment
2. Recording Bias Adjustment
3. Recording Level Adjustment.
4. ALC Operation Check

** As the reference recording level is 250nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.*

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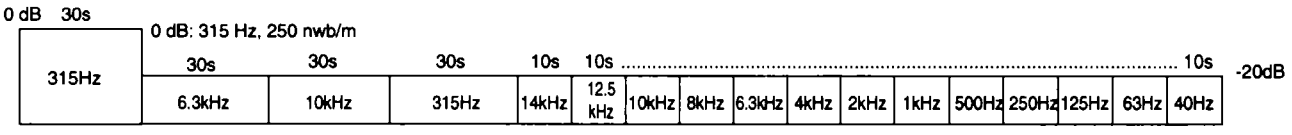



Fig. 2–1 STD–331E Test Tape

## ■ Playback Adjustment

### 1. Head Azimuth Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

| Step | Tape Selector (AUTO) | Mode | Input Signal/ Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | NORMAL | PLAY | STD-331E test tape (Playback: 10kHz, – 20dB) | Deck I<br>Deck II | Head azimuth adjustment screw (Fig. 2-2 and 2-3) | TAPE TEST POINT (L, Rch) (AF Assy) | Max. playback signal level | After adjustment, apply silicon bond to the head azimuth adjustment screw. |

### 2. Playback Level Adjustment

- Since this adjustment determines playback Dolby NR level, perform it carefully.

| Step | Tape Selector (AUTO) | Mode | Input Signal/ Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | NORMAL | PLAY | STD-331E test tape (Playback: 315Hz, 0dB) | Deck I<br>Deck II | VR4201 (Lch) VR4202 (Rch)<br>VR4203 (Lch) VR4204 (Rch) | TAPE TEST POINT (L, Rch) (AF Assy) | – 4.2 dBV | |

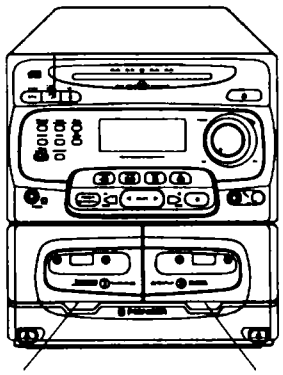



Fig. 2–2

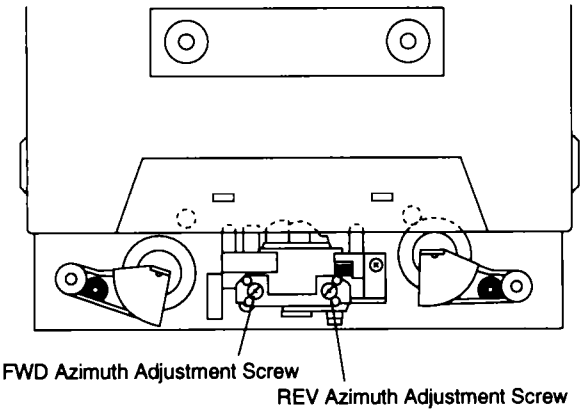
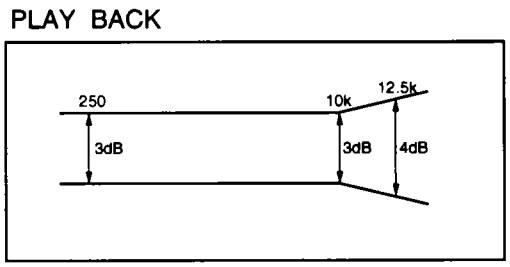



Fig. 2–3 Head Azimuth Adjustment



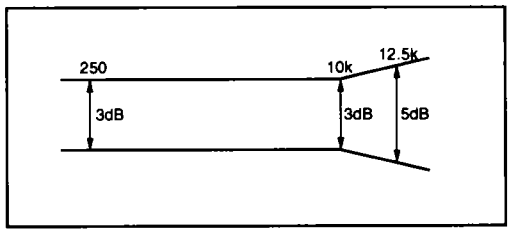




Fig. 2–4 Frequency Characteristics

## ■ Recording Adjustment

### 1. Bias Oscillation Frequency Adjustment

| Step | Tape Selector (AUTO) | Mode | Input Signal/ Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | NORMAL | REC | Load the STD–631 or STD–632 test tapes and set the recording mode. | Deck I | ——— | ——— | Oscillation frequency to be 105.0kHz ±2kHz. | When the power is turned ON while the MONO button is depressed, the frequency will decrease 2 – 3 kHz. |
| | | | | Deck II | L4351 | Between Ⓐ point in Fig. 2–5 and GND. | | |

### 2. Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

| Step | Tape Selector (AUTO) | Mode | Input Signal/Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | NORMAL | REC | Input a 315Hz signal to the MD/CD II terminal and set the input selector to MD/CD II. | Deck I | ——— | TAPE TEST POINT (L, Rch) (AF Assy) | – 25.2 dBV | |
| | | | | Deck II | Input signal level | | | |
| 2 | NORMAL | REC→ PLAY | Load the STD–631 or STD–632 test tapes and record/playback the 315Hz and 10kHz signals. (see the Note below) | Deck I | ——— | TAPE TEST POINT (L, Rch) (AF Assy) | Repeat adjustment until playback level of the 10kHz signal is within 0±0.5dB from that of the 315Hz signal. | |
| | | | | Deck II | VR4351 (Lch) VR4352 (Rch) | | | |

*Note: Set the 10kHz input signal level to the same value as the 315Hz input signal level of step 1.*

### 3. Recording Level Adjustment

| Step | Tape Selector (AUTO) | Mode | Input Signal/Test Tape | Adjusting Points | | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1 | NORMAL | REC | Input a 315Hz signal to the MD/CD II terminal and set the input selector to MD/CD II. | Deck I | Input signal level | TAPE TEST POINT (L, Rch) (AF Assy) | – 8.2 dBV | |
| | | | | Deck II | | | | |
| 2 | NORMAL | REC→ PLAY | STD–631 or STD–632 test tape and record/playback the 315Hz signal. | Deck I | ——— | TAPE TEST POINT (L, Rch) (AF Assy) | Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes –8.2dBV. | |
| | | | | Deck II | VR4301 (Lch) VR4302 (Rch) | | | |

### 4. ALC Operation Check

| Step | Tape Selector (AUTO) | Mode | Input Signal/Test Tape | Adjusting Points | Measurement Points | Adjustment Value | Remarks |
|---|---|---|---|---|---|---|---|
| 1 | NORMAL | REC / PLAY | Input a 315Hz signal to the MD/CD II terminal and set the input selector to MD/CD II. | Input signal level | TAPE TEST POINT (L, Rch) (AF Assy) | – 8.2 dBV | |
| 2 | | | | Set to a level +10 dB above the input level at step 1. | | –3.2±2.5 dBV | |

## AF ASSY

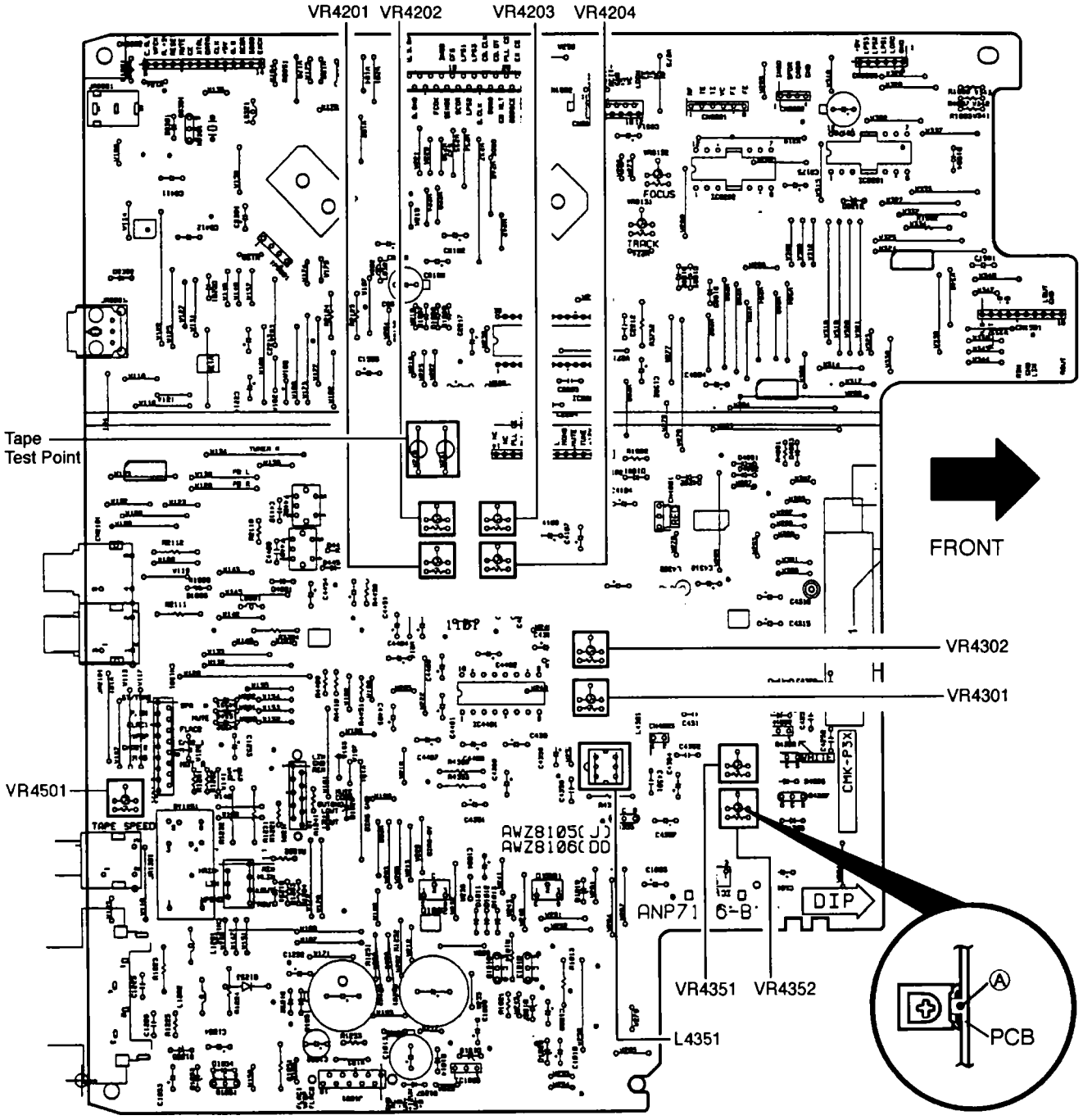
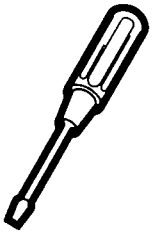
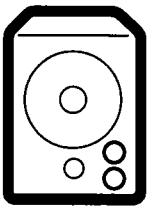
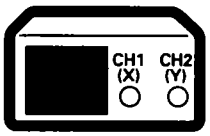
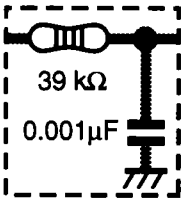



Fig. 2-5 Adjustment Points

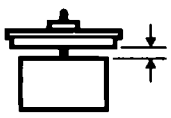
# 5.3 CD SECTION (CD部の調整)

## 1. PREPARATIONS (準備)

### 1.1 Jigs and Measuring Instruments (使用測定器/治工具類)

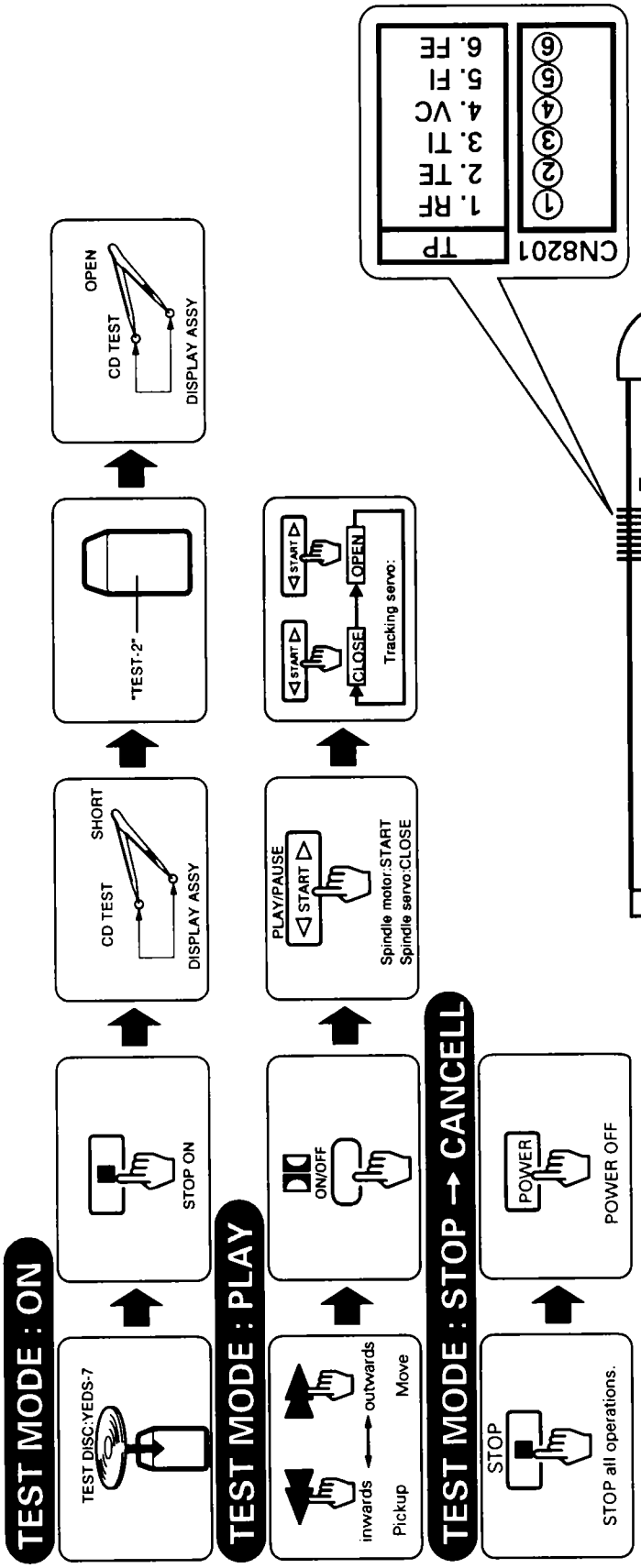
| | | | | |
|---|---|---|---|---|
| **8-cm DISC (With at least about 20 minutes recording) (20分程度信号の入ったディスク)** | CD TEST DISC (YEDS-7) | ⊖ Precise screwdriver |  ⊖ screwdriver (small) | ⊕ screwdriver (medium) |
| **Ball point hexagon wrench (size: 1.5mm) GGK1002** ボールポイント付 六角ドライバー（対辺 1.5mm） | ⊕ screwdriver (large) |  Low-frequency oscillator |   Dual-trace oscilloscope (10 : 1 probe) |   Low pass filter (39 kΩ + 0.001mF) |

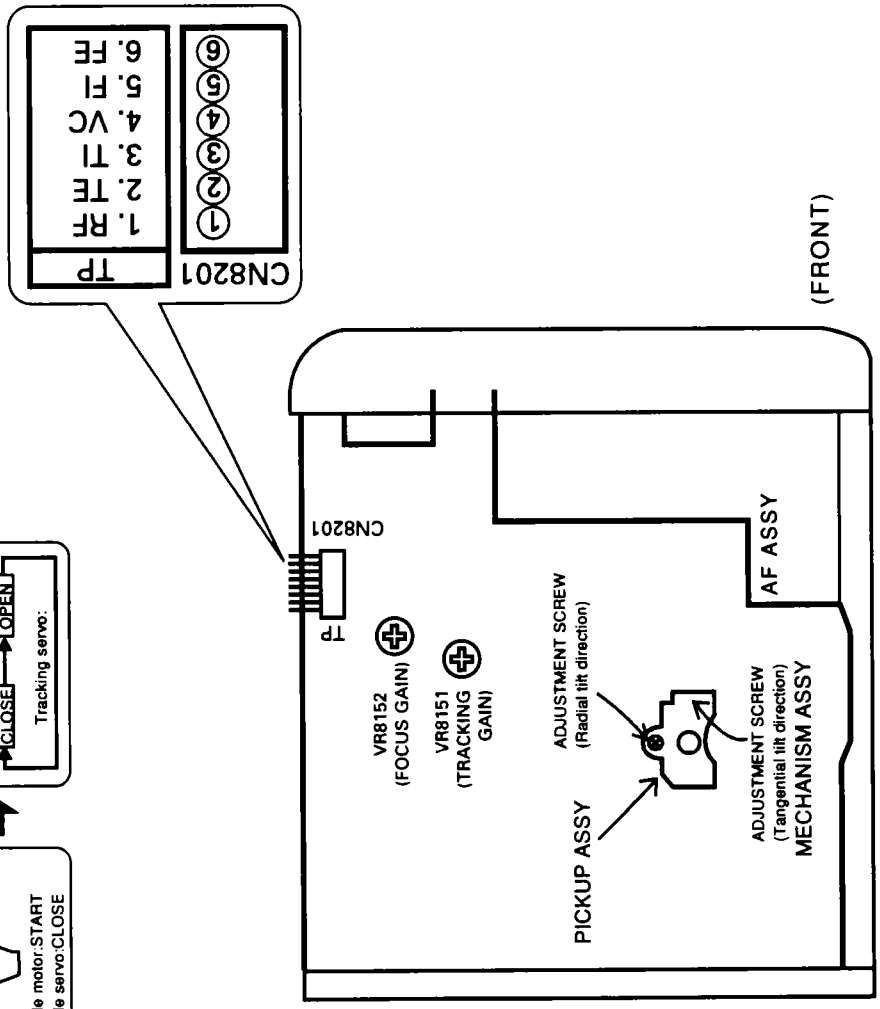
### 1.2 Necessary Adjustment Points (調整に必要な項目)

| When (このような時) | Adjustment points |
|---|---|
| Exchange PICKUP (ピックアップを交換した時) | 1.2.3.4.5.6. → Page 59～61 |
| Exchange MAIN ASSY (メイン ASSYを交換した時) | 1.2.3.4.5.6. → Page 59～61 |
| Exchange SERVO MECH ASSY (サーボメカ ASSYを交換した時) | 1.2.3.4.5.6. → Page 59～61 |
| Exchange SPINDOLE MOTOR (スピンドルモーターを交換した時) |  ADJ → Page 13 |

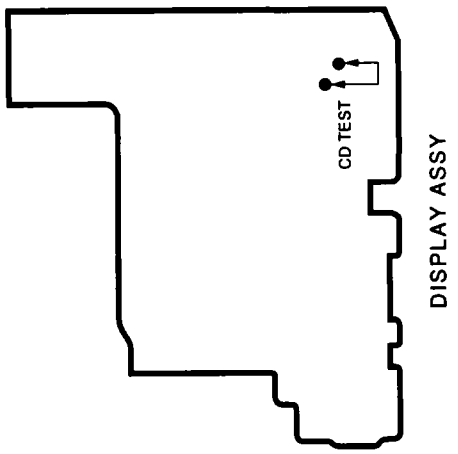
## 2. ADJUSTMENT (調整)

### 2.1 How to Start/Cancel/Test Mode (テストモードの設定/解除)



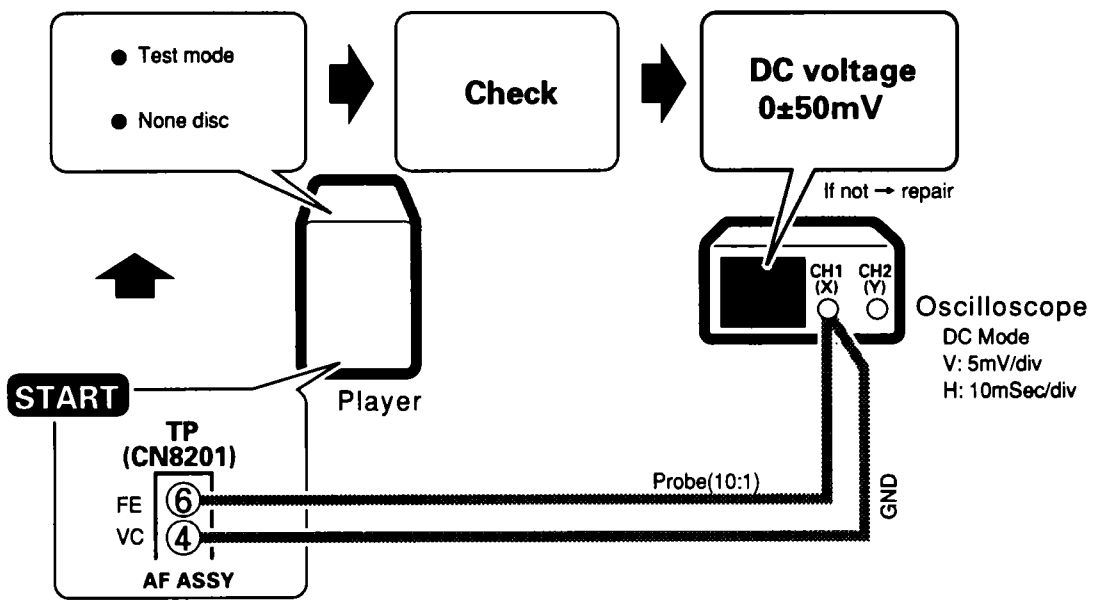




### 2.2 Adjustment Locations
(テストポイントと調整用VRの位置)

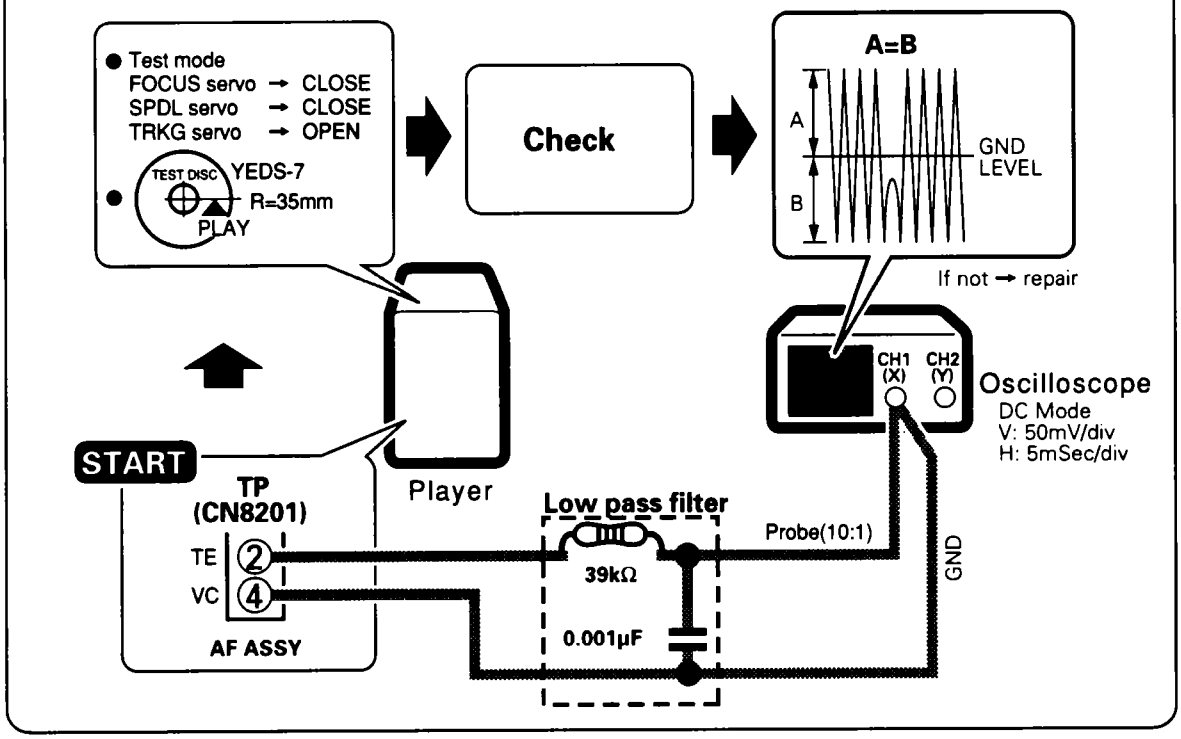


## 2.3 Check and Adjustment (確認、調整)

### 1. Focus Offset Check
(フォーカスオフセット確認)

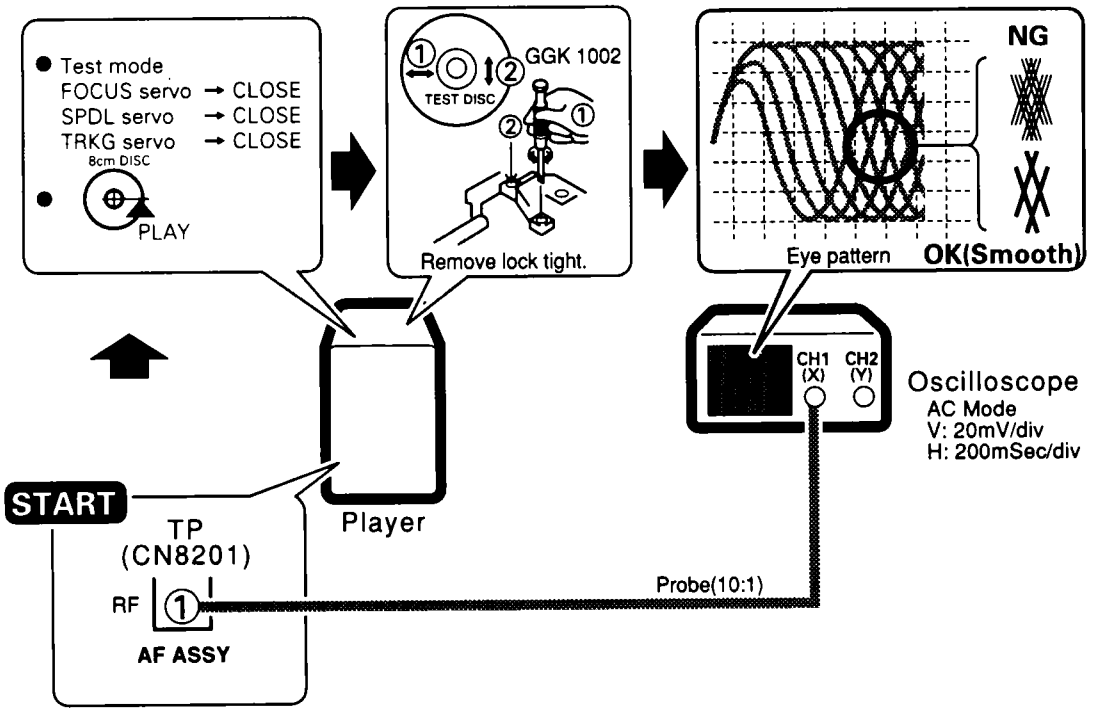



### 2. Tracking Error Balance Check
(トラッキングエラーバランス確認)



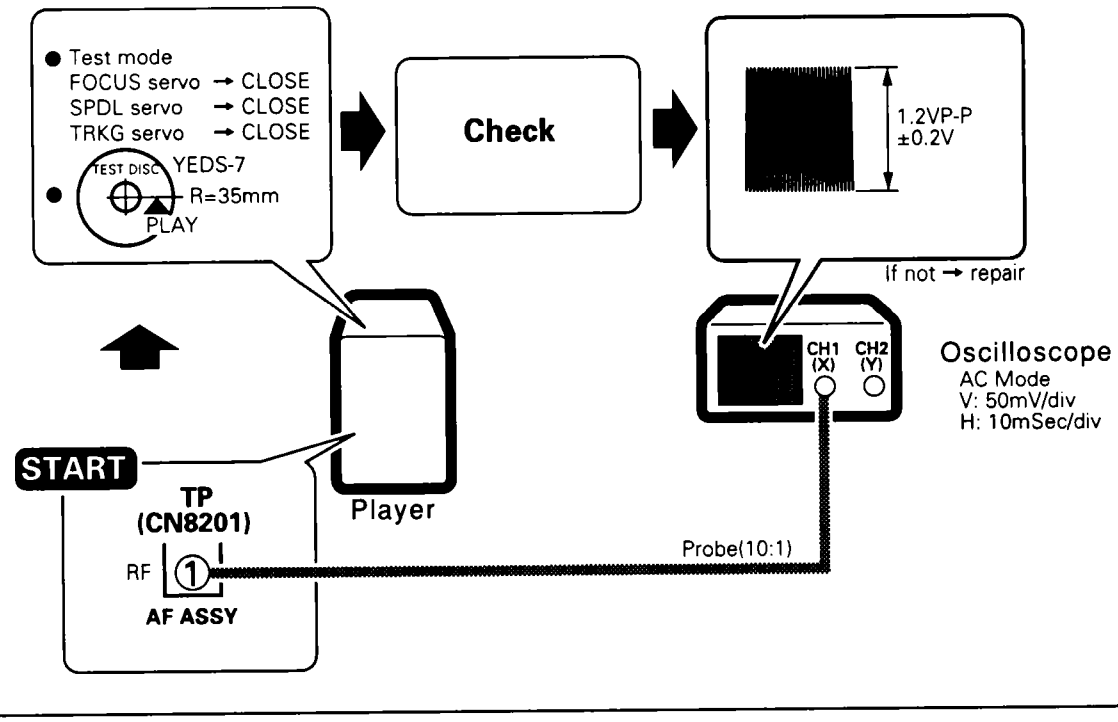
## 3. Pickup ①Radial / ②Tangential Direction Tilt Adjustment

(ピックアップ①ラジアル方向②タンジェンシャル方向の傾き調整)




## 4. RF Level Check

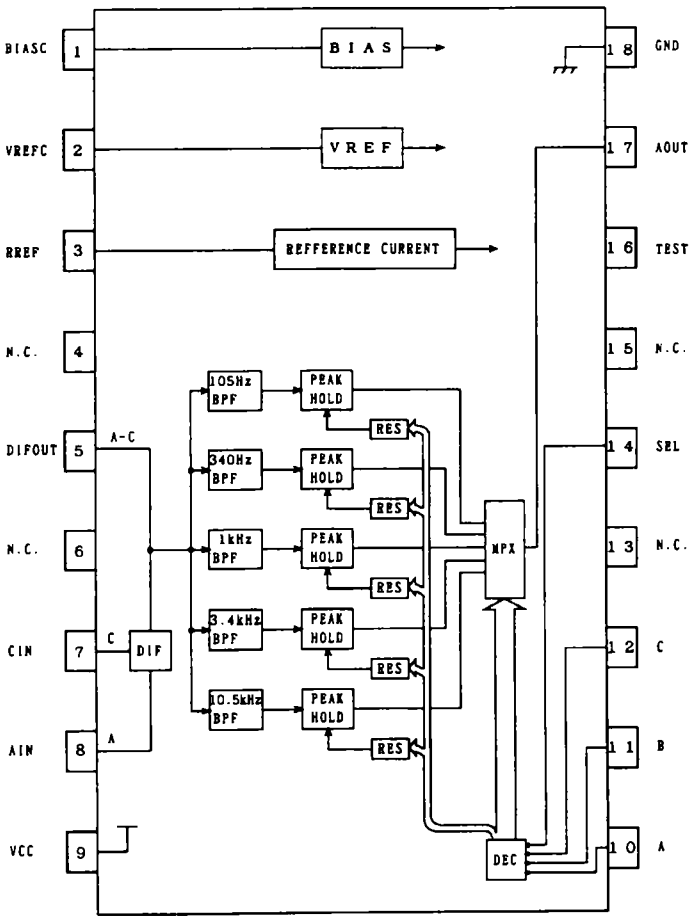
(RFレベル確認)



## ■ BA3835F (IC3701 : DISP. ASSY)

### ● Display Control Micro-computer

● Pin Assignment (Top view)




● Pin Function

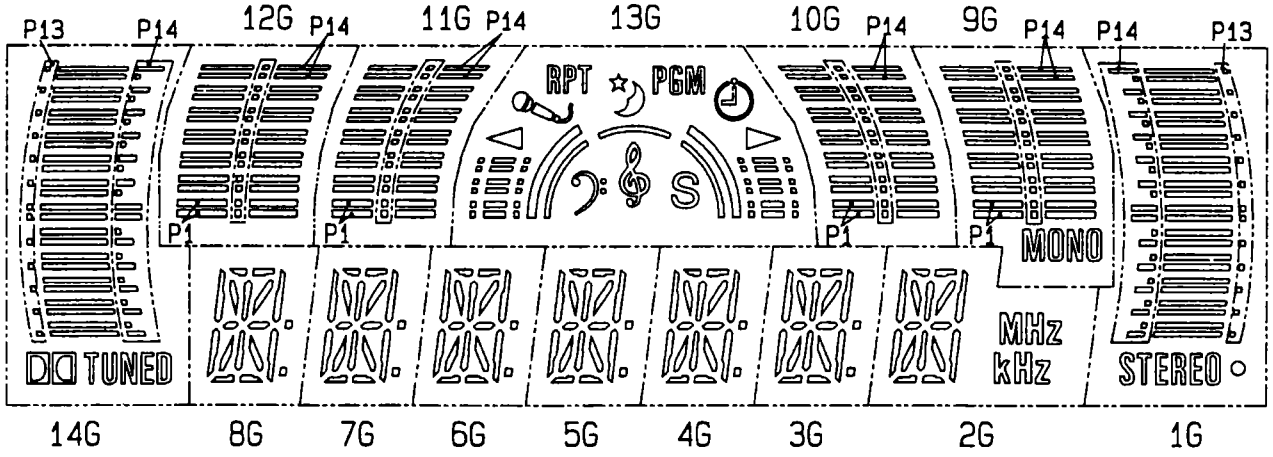
| No | Pin Name | Description |
|---|---|---|
| 1 | BIASC | Decoupling capacitor connection terminal for linear part reference voltage |
| 2 | VREFC | Decoupling capacitor connection terminal for logic part reference voltage. |
| 3 | RREF | Reference resistor connection terminal for band pass filter to setting. fo adjustment is possible by this external resistor. (However, only entire band shift.) |
| 4 | N.C. | Not used |
| 5 | DIFOUT | Differential amplifier output terminal OPEN for normal use. |
| 6 | N.C. | Not used |
| 7 | CIN | Differential amplifier input terminal 2 Connected to the audio system GND via a capacitor. |
| 8 | AIN | Differential amplifier input terminal 1. Audio signal input via a capacitor. |
| 9 | VCC | Power source |
| 10 | A | Output selection control terminal (Refer to the output selection logic table.) |
| 11 | B | |
| 12 | C | |
| 13 | N.C. | Not used |
| 14 | SEL | Output selection control terminal (Refer to the output selection logic table.) |
| 15 | N.C. | Not used |
| 16 | TEST | Test signal input terminal Connected to GND for normal use. |
| 17 | AOUT | Multiplexer output terminal One of the five peak hold voltageband a is selected and output is executed. After the ewnd of selection, discharge to a level of peak value minus 3 db is executed by means of a reset pulse. |
| 18 | GND | Ground |

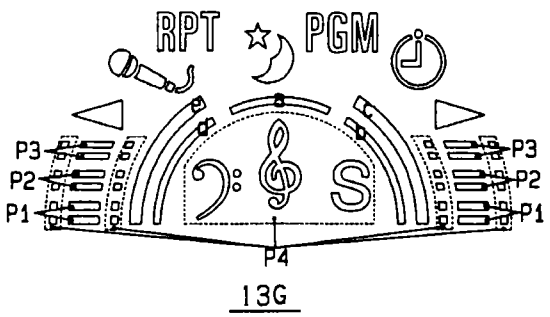
# 7. FL INFORMATION

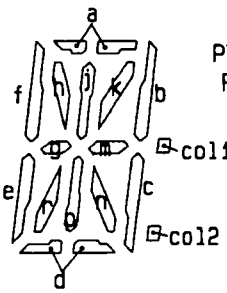
## ■ AAV7025 (V1901: DISP. ASSY)

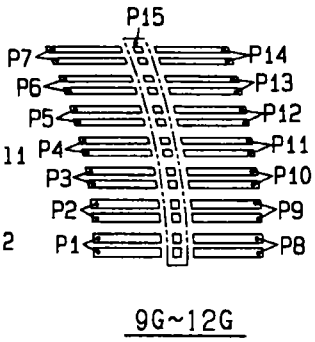
## ● FL TUBE

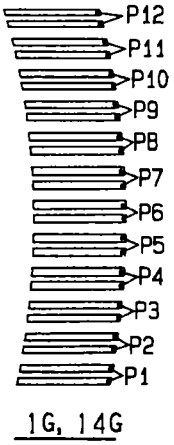
● Grid Assignment



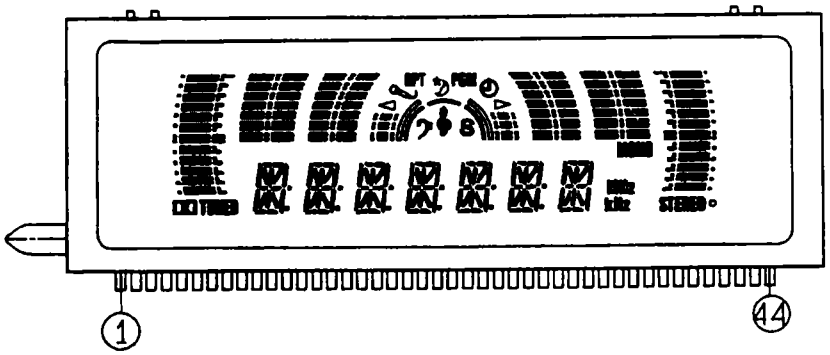



# XR-P160

● Anode Assignment

| | 14G | 13G | 12G | 11G | 10G | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S1 | P1 | P1 | P1 | P1 | P1 | P1 | a | a | a | a | a | a | a | P1 |
| S2 | P2 | P2 | P2 | P2 | P2 | P2 | b | b | b | b | b | b | b | P2 |
| S3 | P3 | P3 | P3 | P3 | P3 | P3 | j | j | j | j | j | j | j | P3 |
| S4 | P4 | P4 | P4 | P4 | P4 | P4 | k | k | k | k | k | k | k | P4 |
| S5 | P5 | RPT | P5 | P5 | P5 | P5 | h | h | h | h | h | h | h | P5 |
| S6 | P6 | a | P6 | P6 | P6 | P6 | f | f | f | f | f | f | f | P6 |
| S7 | P7 | d | P7 | P7 | P7 | P7 | m | m | m | m | m | m | m | P7 |
| S8 | P8 | e | P8 | P8 | P8 | P8 | g | g | g | g | g | g | g | P8 |
| S9 | P9 | b | P9 | P9 | P9 | P9 | c | c | c | c | c | c | c | P9 |
| S10 | P10 | c | P10 | P10 | P10 | P10 | r | r | r | r | r | r | r | P10 |
| S11 | P11 | | P11 | P11 | P11 | P11 | n | n | n | n | n | n | n | P11 |
| S12 | P12 | | P12 | P12 | P12 | P12 | p | p | p | p | p | p | p | P12 |
| S13 | P13 | | P13 | P13 | P13 | P13 | e | e | e | e | e | e | e | P13 |
| S14 | P14 | PGM | P14 | P14 | P14 | P14 | d | d | d | d | d | d | d | P14 |
| S15 | DIG | ▷ | P15 | P15 | P15 | P15 | col 1 | col 1 | col 1 | col 1 | col 1 | col 1 | MHz | ○ |
| S16 | TUNED | ◁ | | | | MONO | col 2 | col 2 | col 2 | col 2 | col 2 | col 2 | kHz | STEREO |

● Pin Assignment



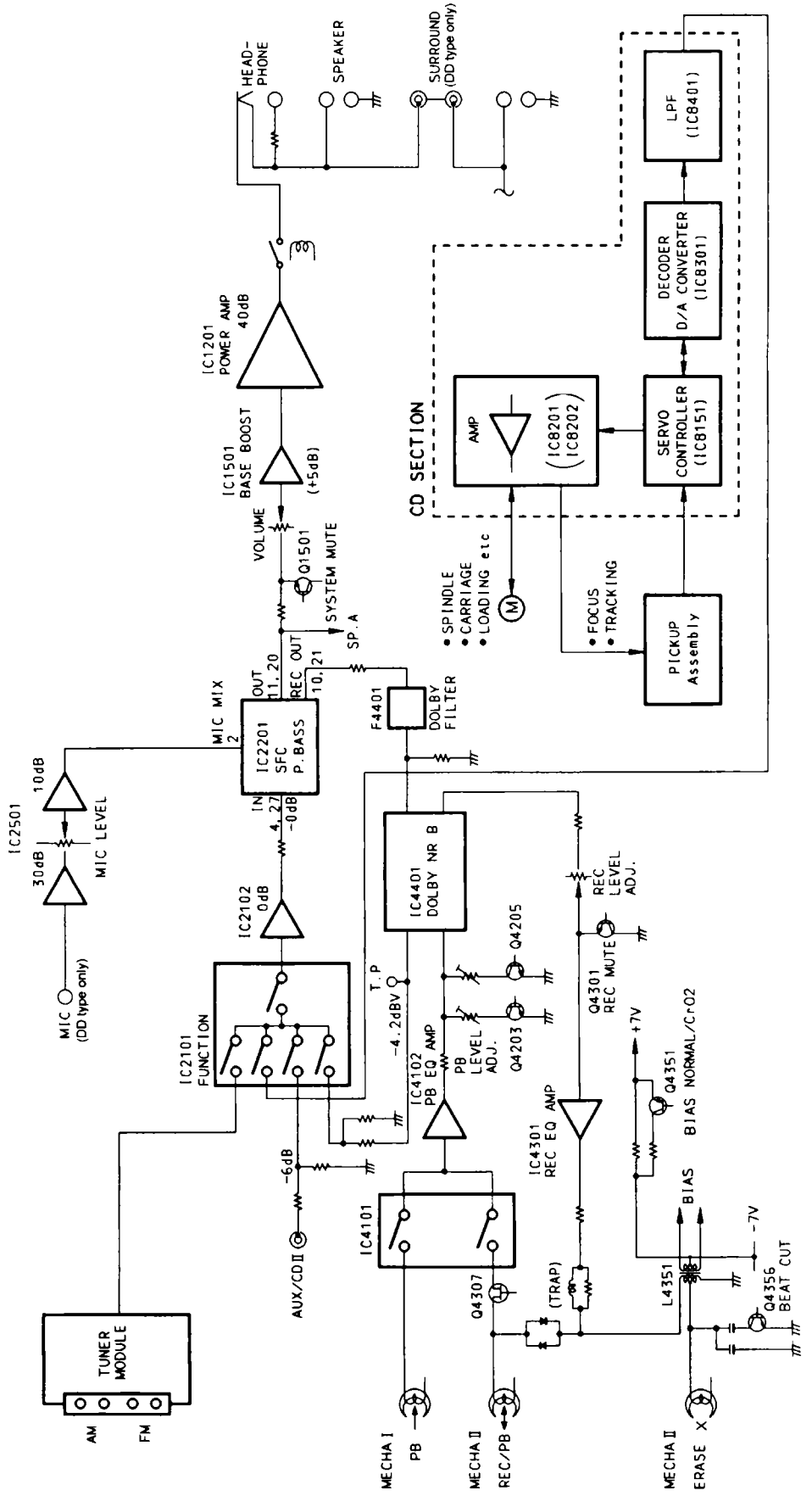

● Pin Connection

| Pin No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Assignment | F1 | F1 | NP | G14 | G13 | G12 | G11 | G10 | G9 | NL | NL | NL | NL | NL | NL | NL | NL | G8 | G7 | G6 | G5 | G4 |

| Pin No. | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Assignment | G3 | G2 | G1 | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | S11 | S12 | S13 | S14 | S15 | S16 | NP | F2 | F2 |

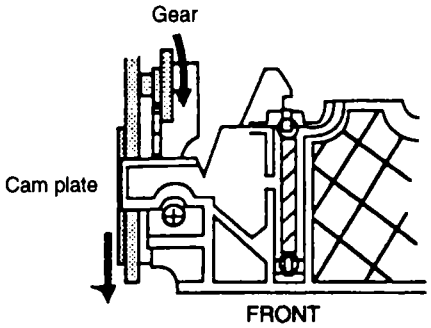
F1, F2:Filament G1~G14:Grid S1~S16:Anode NL:No Lead NP:No Pin

# 8. BLOCK DIAGRAM



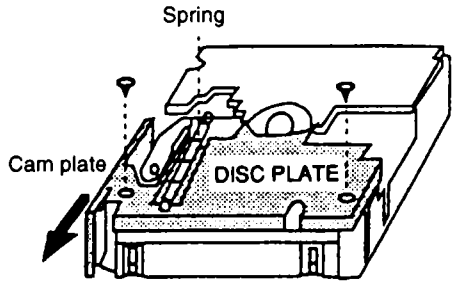
# 9. DISASSEMBLY

## ● CD DISC MANUAL REMOVAL METHOD

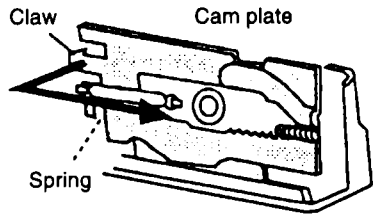



Turn the gear in arrow direction to the front, and move the cam plate to the front. When the gear is turned until the cam plate comes to the very front position (EJECT position), the CD disc will be pulled out.

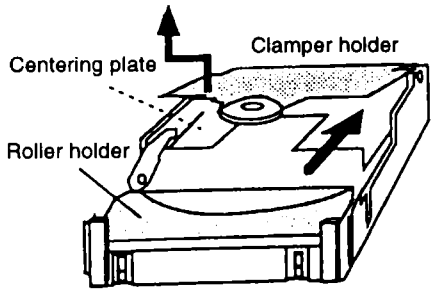
## ● SERVOMECHANISM EXCHANGE METHOD AND MECHANISM ADJUSTMENT METHOD




Remove the spring and the two screws, and then remove the disc plate. Move the cam plate to the very front position (EJECT position). (Refer to the CD disc manual removal method.)

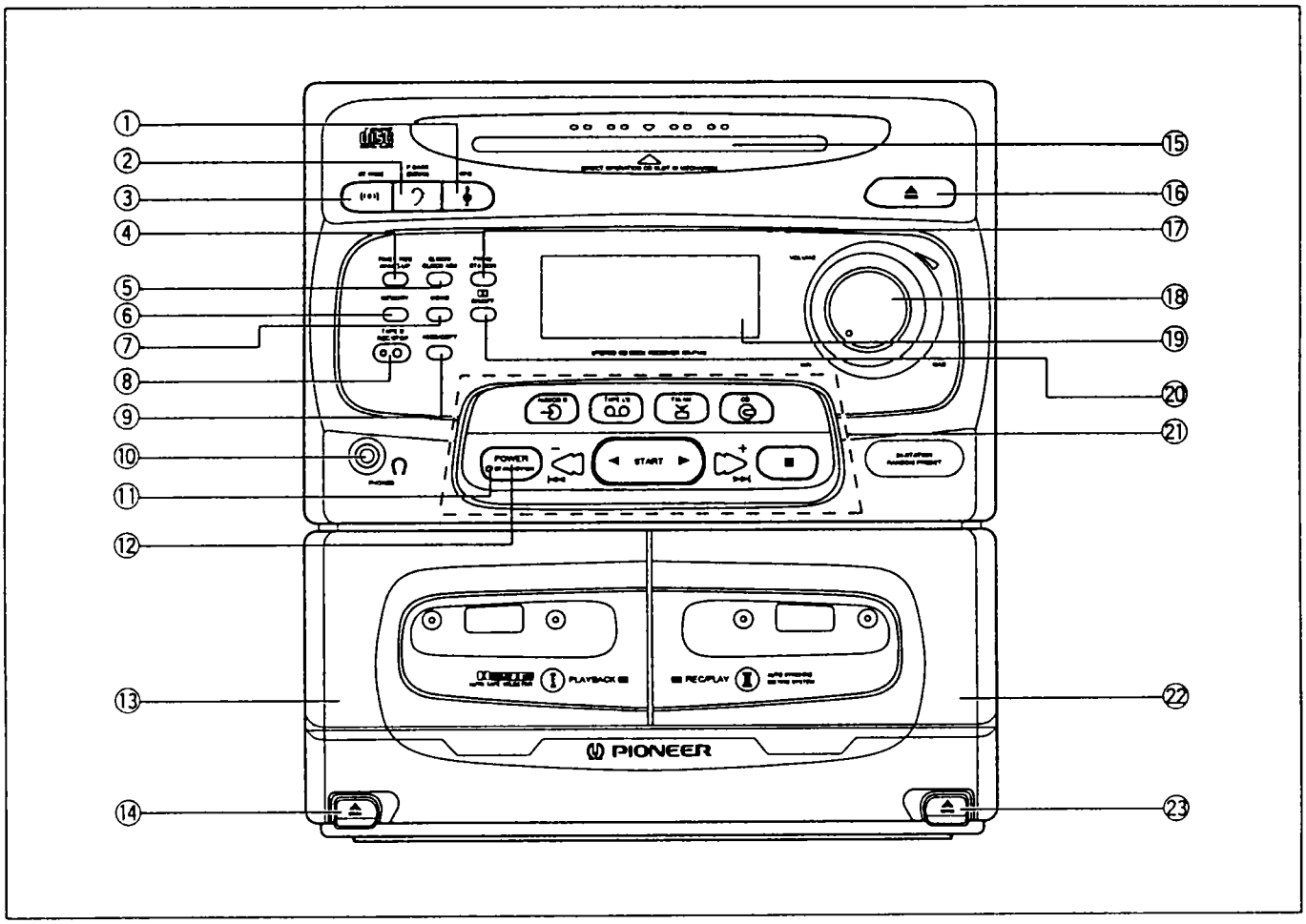



Remove the spring.
Remove to the front while pulling the claw part of the cam plate to the outside.




Raise the clamper holder lightly, slide it in arrow direction, and remove it. When the centering plate is moved to the rear, the four screws fixing the servomechanism become visible. When these screws are removed, the servomechanism assembly can be removed.
TAN and RAD adjustment are executed from above with the clamper holder and the roller holder removed and only the magnet clamper placed onto the CD disc.

# 10. PANEL FACILITIES




### ①SFC button

Each time this button is pressed, the mode changes in the following sequence:

HALL → DISCO → MOVIE → off → HALL

### ②P.BASS (DEMO) button

Each time this button is pressed, the mode changes in the following sequence:

P.BASS 1 → P.BASS 2 → off → P.BASS 1

### ③ST. WIDE button

Each time this button is pressed, the mode changes in the following sequence:

ST. WIDE 1 → ST. WIDE 2 → off → ST. WIDE 1

### ④TIMER REC/WAKE-UP button

### ⑤CLOCK/CLOCK ADJ button

### ⑥MEMORY button

### ⑦MONO button

### ⑧Rec/Rec stop button

### ⑨ASES/COPY button

### ⑩Headphones jack

### ⑪STANDBY indicator

This is the switch for electric power.

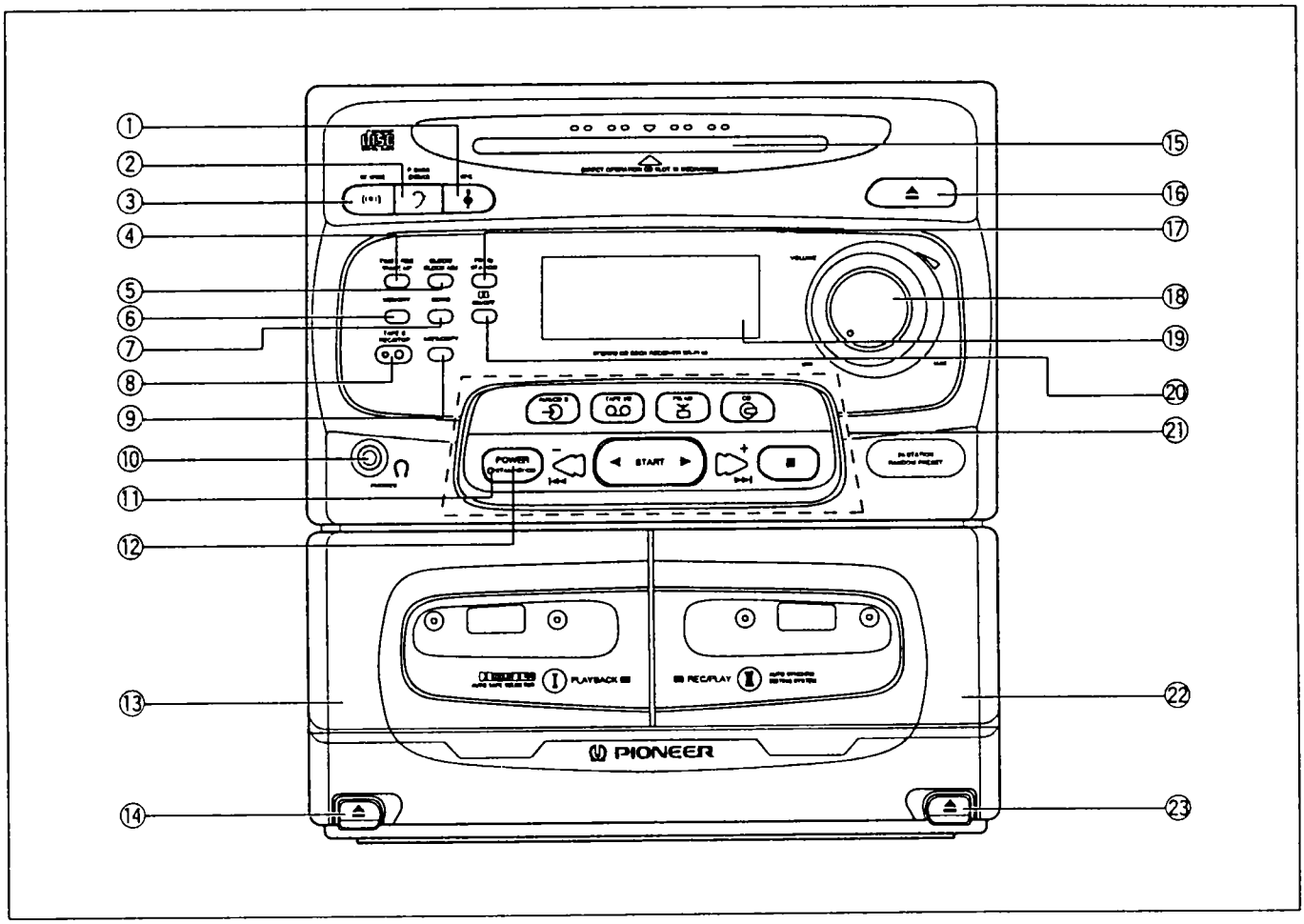
ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)

### ⑫POWER STANDBY/ON switch

### ⑬TAPE I cassette door

### ⑭TAPE I Eject button (⏏)




**⑮Disc slot**

**⑯CD Eject button (▲)**

**⑰FREQ/STATION button**

Each time this button is pressed, the mode changes between FREQUENCY and STATION.

**⑱Volume control (VOLUME)**

**⑲Display**

**⑳DD (DOLBY*) NR ON/OFF button**

Each time this button is pressed, DOLBY NR system turns ON and OFF.

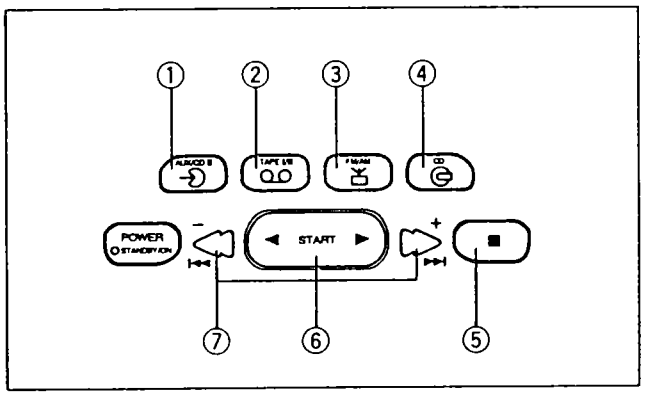
**㉑Function buttons**

**㉒TAPE II cassette door**

**㉓TAPE II Eject button (▲)**

- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

## Function button section




① **AUX/CD II function button and indicator**
② **TAPE (I/II) function button and indicator**
③ **Tuner (FM/AM) function button and indicator**
④ **CD function button and indicator**
⑤ **STOP button (■)**
⑥ **START button (◄ ►)**
⑦ **, buttons**

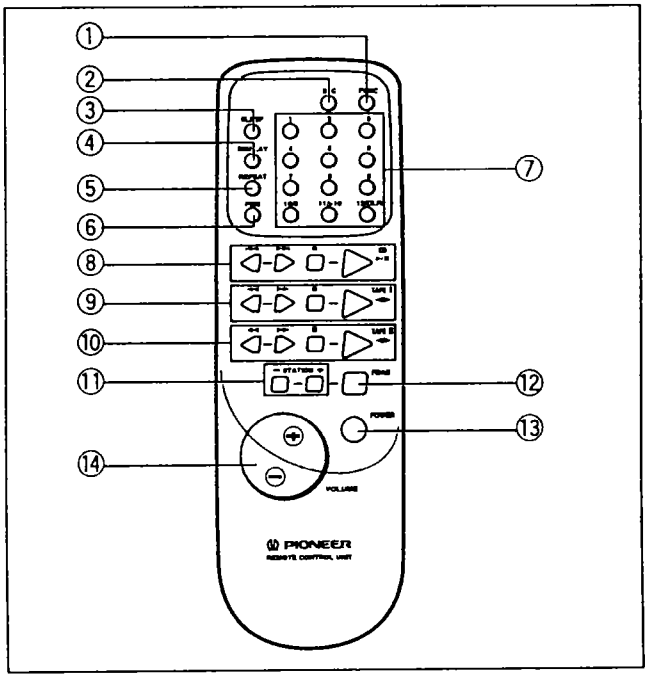
- **Roles of the common operation buttons (The roles of the buttons vary depending on the input functions as shown below.)**

**During CD input**
START: Play/pause button
STOP: Stop button
: Fast forward/track search button
: Fast reverse/track search button

**During cassette deck input**
START: Play button/Tape transport direction
STOP: Stop button
: Fast forward button
: Rewind button

**During tuner operation**
: Frequency & Station + (up) button
: Frequency & Station – (down) button

## REMOTE CONTROL UNIT




① **Function button (FUNC)**
Each time this button is pressed, the function changes in the following sequence:
CD → AUX/CD II → TAPE → TUNER

② **SFC mode button**
Each time this button is pressed, the function changes in the following sequence:
HALL → DISCO → MOVIE → off

③ **SLEEP timer button**
④ **DISPLAY button**
⑤ **REPEAT button**
⑥ **PGM button**
⑦ **Number buttons**
These buttons are used for selecting track numbers of a CD and for scanning preset stations.
⑧ **CD operation buttons**
**(Track search ⏮ ⏭, Stop ■, Play/Pause ►/II)**
⑨ **TAPE I operation buttons**
**(Fast ◄◄ ►►, Stop ■, Play ◄ ►)**
⑩ **TAPE II operation buttons**
**(Fast ◄◄ ►►, Stop ■, Play ◄ ►)**
⑪ **STATION – (down), + (up) buttons**
Before operation, memorize broadcast stations with the STATION –, + buttons.
+ ... Stations change in order in the upward direction.
– .... Stations change in order in the downward direction.
⑫ **FM/AM band button**
⑬ **POWER button**
⑭ **VOLUME + (up), – (down) button**
Increase/decrease the sound volume of the unit.

# 11. SPECIFICATIONS

## STEREO CD CASSETTE DECK RECEIVER

### Amplifier section

**<XR-P160>**

Continuous Power Output (RMS) ..... 35 W + 35 W
(1 kHz, T.H.D. 10 % 6 Ω)
Continuous Power Output (DIN) ..... 27 W + 27 W
(1 kHz, T.H.D. 1 % 6 Ω)

- *Above specifications are for when power supply is 230 V.*

### FM/AM Tuner section

**FM tuner section**

Frequency Range ..... 87.5 MHz to 108 MHz
Antenna input ..... 75 Ω unbalanced

**AM tuner section**

Frequency Range
With 9 kHz step ..... 531 kHz to 1,602 kHz
Antenna ..... Loop antenna

### CD section

Type ..... Compact disc digital audio system
Wow and Flutter ..... Limit of measurement
(±0.001 % W.PEAK) or less (EIAJ)

### Cassette deck section

Systems ..... 4 track, 2-channel stereo
Heads ..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor ..... DC servo motor x 1
Tape type ..... TYPE I (Normal)/TYPE II (HIGH/$CrO_2$) tape

### Miscellaneous

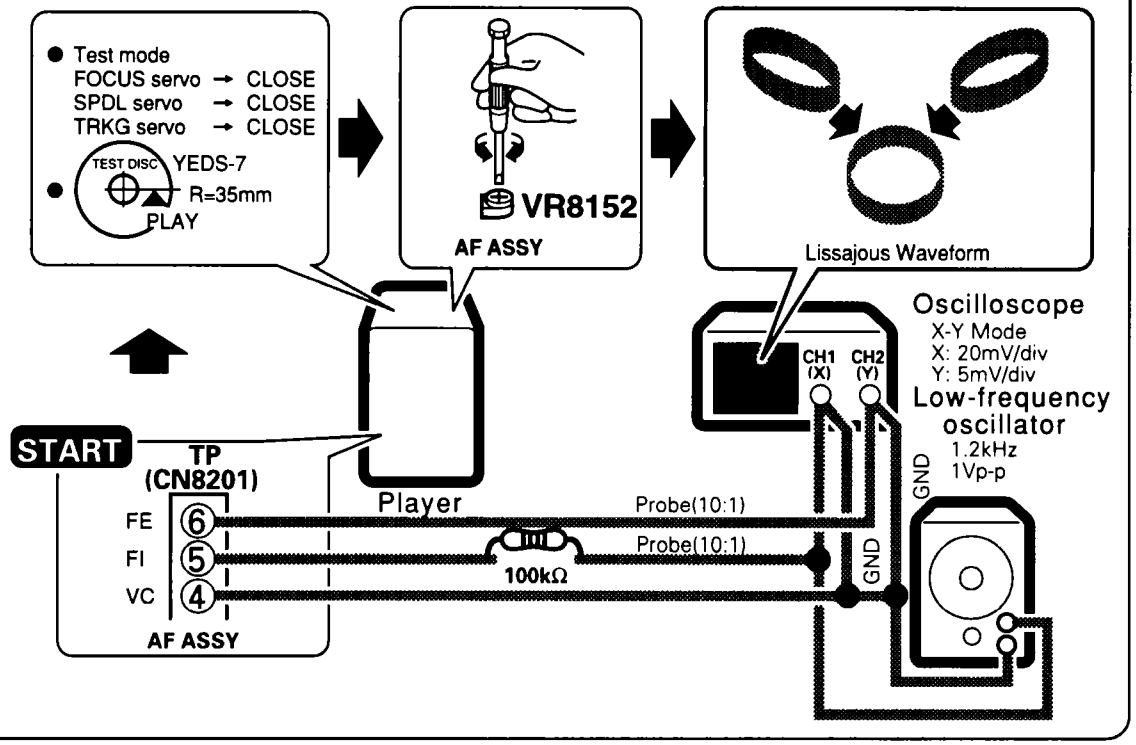
Power Requirements ..... AC 230 V, 50/60 Hz (U.K. model)
AC 220 - 230 V, 50/60 Hz (European model)
Power Consumption ..... 187 W
Dimensions ..... 240 (W) x 270 (H) x 297 (D) mm
Weight (without package) ..... 5.5 kg

### Accesories

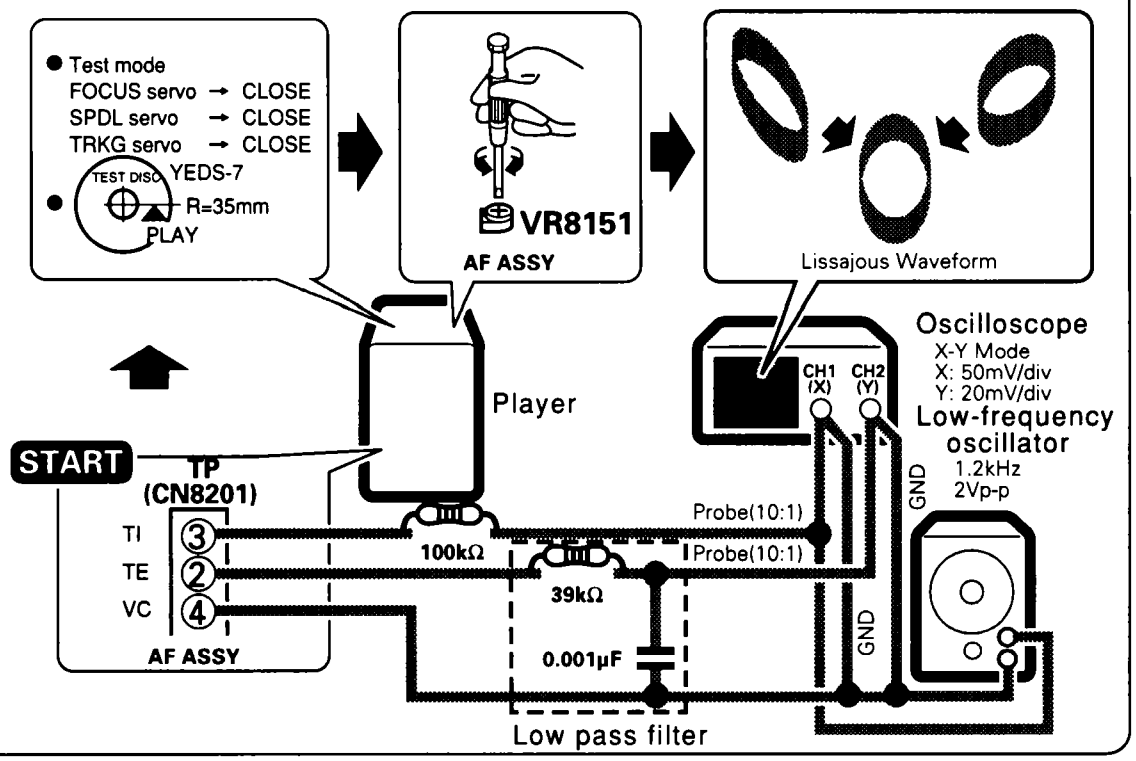
Operating instructions ..... 1
Remote control unit ..... 1
AAA/R03 dry cell batteries ..... 2
FM T-type antenna ..... 1
AM loop antenna ..... 1

***NOTE:***
*Specifications and design subject to possible modification without notice, due to improvement.*

## 5. FOCUS SERVO LOOP GAIN ADJUSTMENT
(フォーカスサーボループゲイン確認)




## 6. TRACKING SERVO LOOP GAIN ADJUSTMENT
(トラッキングサーボループゲイン確認)



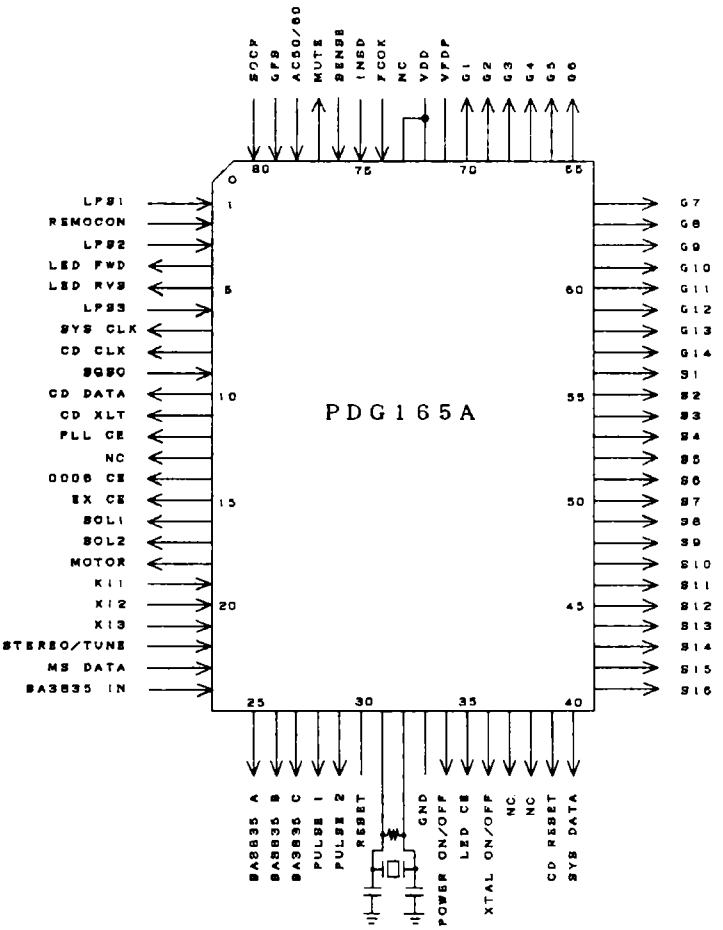
# 6. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

## ■ PDG165A (IC1901 : DISP. ASSY)

### ● System Control Micro-computer

● Pin Assignment (Top view)




● Pin Function

| No | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | LPS1 | I | DISC detection photo 1 |
| 2 | REMOTE | I | Remote control signal input |
| 3 | LPS2 | I | DISC detection photo 2 |
| 4 | LED FWD ▷ | O | LED control |
| 5 | LED RVS ◁ | | |
| 6 | LPS3 | I | DISC clamp completion switch |
| 7 | SYS CLK | O | CLK output |
| 8 | CD CLK | O | CD decoder clock |

| No | Pin Name | I/O | Description |
|---|---|---|---|
| 9 | SQSO | I | DISC time information |
| 10 | CD DATA | O | CD decorder DATA output |
| 11 | CD XLT | O | CD decoder latch after transmission |
| 12 | PLL CE | O | PLL CE output |
| 13 | N.C. | – | Not used |
| 14 | 0006CE | O | PM0006 CE output |
| 15 | EX CE | O | BU7094 CE output |
| 16 | SOL1 | O | DECK mechanism I solenoid control |

| No | Pin Name | I/O | Description |
|---|---|---|---|
| 17 | SOL2 | O | DECK mechanism II solenoid control |
| 18 | MOTOR | O | MOTOR ON/OFF |
| 19 | KI1 | I | Key return input I |
| 20 | KI2 | I | Key return input II |
| 21 | KI3 | I | Key return input III |
| 22 | STEREO/ TUNE | I | 0 2.5 5.0<br>STEREO/TUNE TUNE |
| 23 | MS DATA | I | MUSIC search |
| 24 | BA3835 IN | I | BA3835 input |
| 25 | BA3835 A | I | BA3835 A |
| 26 | BA3835 B | I | BA3835 B |
| 27 | BA3835 C | I | BA3835 C |
| 28 | PULSE 1 | I | DECK mechanism I operation detection |
| 29 | PULSE 2 | I | DECK mechanism II operation detection |
| 30 | RESET | I | POWER ON RESET |
| 31 | EXTL | I | ———— |
| 32 | XTL | | |
| 33 | Vss | | |
| 34 | Power/ON/OFF | O | BU4094 and power supply circuit and P.P muting control |
| 35 | LED CE | O | BU4094 (for LED) CE output |
| 36 | XTAL ON/OFF | O | CD XTAL ON/OFF |
| 37 | N.C. | – | ———— |
| 38 | | | |
| 39 | CD RESET | O | CD and CDG RESET output |
| 40 | SYS DATA | O | PLL, PM0006, BU4094 data |
| 41 \| 56 | S16 \| S1 | O | FL segment output |
| 57 \| 70 | G14 \| G1 | O | FL grid output |
| 71 | VFDP | – | ———— |
| 72 | VDD | | |
| 73 | N.C. | | |

| No | Pin Name | I/O | Description |
|---|---|---|---|
| 74 | FCOK | I | Decoder monitor H. FOCUS OK |
| 75 | INSD | I | Pickup home position recognition |
| 76 | SENCE | I | Decoder monitor |
| 77 | MUTE | O | System mute output |
| 78 | AC 50/60 | I | ———— |
| 79 | GFS | I | Decoder monitor, rotation speed frame check |
| 80 | SOCR | I | Decoder monitor, Q data interrupt signal |